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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

BEFORE THE HONORABLE MAXINE M. CHESNEY, JUDGE

POWER INTEGRATIONS, INC.,)
A DELAWARE CORPORATION,)
)
PLAINTIFF,)

VS.)

NO. C 09-05235 MMC

FAIRCHILD SEMICONDUCTOR)
INTERNATIONAL, INC., A)
DELAWARE CORPORATION, ET AL.)
)
DEFENDANTS.)

SAN FRANCISCO, CALIFORNIA
THURSDAY, FEBRUARY 20, 2014

TRANSCRIPT OF TRIAL PROCEEDINGS

APPEARANCES:

FOR PLAINTIFF:

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BY: FRANK SCHERKENBACH, ESQ.
HOWARD G. POLLACK, ESQ.
MICHAEL R. HEADLEY, ESQ.
ENRIQUE DUARTE, ESQ.
JONATHAN J. LAMBERSON, ESQ.

REPORTED BY:

BELLE BALL, CSR #8785, CRR, RDR
OFFICIAL REPORTER, U.S. DISTRICT COURT

(APPEARANCES CONTINUED, NEXT PAGE)

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BY: A. MARISA CHUN, ESQ.
JEREMIAH ARMSTRONG, ESQ.

08:15:55 1 **THURSDAY, FEBRUARY 20. 2014**

8:30 A.M.

2 **P R O C E E D I N G S**

3 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
4 PRESENCE OF THE JURY)

08:32:10 5 **THE CLERK:** PLEASE COME TO ORDER.

6 PLEASE BE SEATED.

7 **THE COURT:** ALL RIGHT. GOOD MORNING, COUNSEL.

8 **MR. SCHERKENBACH:** GOOD MORNING.

9 **THE COURT:** OTHER THAN THIS MOTION THAT WE DISCUSSED
08:32:26 10 AT THE VERY END OF THE DAY YESTERDAY CONCERNING THE SCOPE OF
11 DR. WEI'S TESTIMONY, WHAT DO WE HAVE COMING UP, PERHAPS,
12 BEFORE THAT?

13 **MR. JACOBS:** I THINK, YOUR HONOR, WE MAY HAVE A FEW
14 MINOR DISPUTES REGARDING SLIDES THAT ARE INTENDED TO BE USED
08:32:46 15 WITH DR. WEI'S TESTIMONY. HE IS GOING TO COME ON AFTER
16 MR. HUANG. BUT WE ARE STILL TRYING TO RESOLVE SOME OF THOSE.

17 **THE COURT:** OKAY.

18 **MR. SCHERKENBACH:** THEY ARE ACTUALLY FAIRLY
19 SIGNIFICANT ISSUES WITH DR. WEI, APART FROM THE CLAIM
08:32:59 20 CONSTRUCTION ISSUE. SO --

21 **THE COURT:** OKAY. WELL, YOU KNOW WHAT MY THOUGHTS
22 WERE, JUST AS TO A CONCERN THAT HE'S ACTUALLY OFFERING THE
23 SAME OPINION THAT --

24 **MR. SCHERKENBACH:** YES.

08:33:12 25 **THE COURT:** -- I --

08:33:14 1 **MR. JACOBS:** CAN I ADDRESS THAT, YOUR HONOR?

2 **THE COURT:** YOU MAY.

3 **MR. JACOBS:** ALL RIGHT. DR. WEI WILL NOT TESTIFY
4 THAT THE CLAIM REQUIRES A CURRENT COMPARATOR. I TOOK A LOOK
08:33:23 5 AT THE COURT'S MOTION IN LIMINE RULING, AND I TOOK A LOOK AT
6 THE PORTION OF THE EXPERT REPORT THAT WAS DISCUSSED.

7 THIS IS NOT A DISCOVERY ISSUE. IT'S SOMETHING THAT WAS
8 TALKED ABOUT EXTENSIVELY DURING THE DEPOSITIONS OF BOTH OF THE
9 EXPERTS. WHAT IT IS IS IT'S PURE -- IT IS NOT A LITERAL
08:33:43 10 INFRINGEMENT POINT. IT IS A POINT RELATING TO THE DOCTRINE OF
11 EQUIVALENTS.

12 DR. KELLEY HAS TESTIFIED ON DIRECT EXAMINATION THAT A
13 VOLTAGE COMPARATOR AND A CURRENT LIMIT COMPARATOR ARE
14 INTERCHANGEABLE. AND DR. WEI DISAGREES UNDER CERTAIN
08:34:00 15 CONTEXTS.

16 AND SO, THAT'S AS FAR AS THE TESTIMONY IS GOING TO GO. IT
17 IS A DOCTRINE OF EQUIVALENTS POSITION THAT HE DOES NOT THINK
18 THAT THEY ARE INTERCHANGEABLE.

19 AS THE COURT IS AWARE, ONE OF THE TESTS -- THE REASON WHY
08:34:14 20 THE WORD "INTERCHANGEABLE" IS IN THERE IS ONE OF THE TESTS OF
21 THE DOCTRINES OF EQUIVALENTS IS NO INTERCHANGEABILITY.

22 **THE COURT:** ALL RIGHT.

23 **MR. JACOBS:** SO THIS IS JUST A PURE DOCTRINE OF
24 EQUIVALENTS RESPONSE.

08:34:23 25 **THE COURT:** LET ME ASK YOU A COUPLE OF QUESTIONS AND

08:34:25 1 THEN, OBVIOUSLY, I WANT TO HEAR FROM MR. SCHERKENBACH.

2 LET ME GET JUDGE WARE'S CONSTRUCTION.

3 OKAY. ARE WE TALKING ABOUT "CONTROL CIRCUIT?" THAT IS
4 WHAT I UNDERSTAND WE ARE TALKING ABOUT.

08:34:48 5 **MR. JACOBS:** "CONTROL CIRCUIT" AND THE "CURRENT
6 LIMIT" CONSTRUCTION.

7 **THE COURT:** OKAY. WELL, HANG ON. LET ME GET THE --
8 GET THE PATENT, ALSO. I BROUGHT ALL THESE PAPERS OUT --

9 OKAY. WELL, FIRST OF ALL, WE HAVE GOT THE CONTROL
08:35:09 10 CIRCUIT. AND THAT, THAT WAS THE SUBJECT, PRIMARILY, OF MOTION
11 IN LIMINE NO. 5 ON BEHALF OF POWER INTEGRATIONS.

12 **MR. SCHERKENBACH:** (NODS HEAD)

13 **MR. JACOBS:** (NODS HEAD)

14 **THE COURT:** WHERE HE CONSTRUED THAT TERM AS -- WAIT A
08:35:25 15 MINUTE. THAT'S NOT WHAT I WANT. SORRY. FORGET THAT.

16 I'M GOING TO HAVE TO TURN TO THE MOST RECENT BRIEF, WHICH
17 IS KIND OF A LITTLE HARD TO DEAL WITH BECAUSE OF THE WAY IT
18 WAS PRINTED UP.

19 OKAY. HE CONSTRUED IT TO MEAN: "A CIRCUIT THAT CONTROLS
08:35:46 20 THE POWER SWITCH BY GENERATING A WAVEFORM WHICH IS RESPONSIVE
21 TO ELECTRICAL SIGNALS GENERATED WITHIN THE POWER SUPPLY
22 CONTROLLER CIRCUIT."

23 NOW, WHERE IS THIS COMPARATOR COMING UP IN -- IN THE
24 DISCUSSION?

08:36:03 25 **MR. JACOBS:** THE COMPARATOR --

08:36:03 1 **THE COURT:** IN OTHER WORDS, WHERE DOES IT FIT IN?
2 IT'S NOT PART OF THE TERM.

3 **MR. JACOBS:** RIGHT.

4 **THE COURT:** RIGHT. OKAY.

08:36:09 5 **MR. JACOBS:** THE COMPARATOR IS WHAT RECEIVES THE
6 CURRENT LIMIT. AND SO THE CURRENT LIMIT THEN COMES INTO PLAY
7 WITH REGARD TO THE CONSTRUCTION OF THAT TERM. AND IT IS WHAT
8 IS DOING THE COMPARISON THAT'S DESCRIBED IN THE CLAIM.

9 AND SO THE DISPUTE IS, AS YOU KNOW, YOUR HONOR, WHETHER
08:36:29 10 VOLTAGE REPRESENTATIVE OF CURRENT --

11 **THE COURT:** NO, NO, NO. I KNOW THAT.

12 **MR. JACOBS:** UH-HUH.

13 **THE COURT:** I GOT THE DISPUTE.

14 **MR. SCHERKENBACH:** YOUR HONOR, THE CONTROL CIRCUIT
08:36:37 15 INCLUDES THE COMPARATOR THAT WE HAVE BEEN ARGUING ABOUT.

16 **THE COURT:** OKAY.

17 **MR. SCHERKENBACH:** IT'S INSIDE OF THE CONTROL
18 CIRCUIT.

19 **THE COURT:** ALL RIGHT. EVEN THOUGH IT ISN'T --

08:36:45 20 **MR. SCHERKENBACH:** EXPLICITLY RECITED.

21 **THE COURT:** I'M SORRY?

22 **MR. SCHERKENBACH:** IT IS NOT EXPLICITLY RECITED IN
23 THE CLAIM, COMPARATOR.

24 **THE COURT:** IT ISN'T EXPLICITLY RECITED, AND SO IT
08:36:55 25 ISN'T REFERENCED IN JUDGE WARE'S CONSTRUCTION, EITHER.

08:37:01 1 **MR. SCHERKENBACH:** BECAUSE THIS ISSUE WAS NEVER
2 RAISED THEN.

3 **THE COURT:** OKAY.

4 **MR. SCHERKENBACH:** YEAH.

08:37:05 5 **THE COURT:** ALL RIGHT. SO, IS IT THE COMPARATOR
6 THAT'S RESPONSIVE TO SIGNALS?

7 **MR. SCHERKENBACH:** YES.

8 **THE COURT:** OKAY. SO THAT'S THE PART THAT'S
9 RESPONSIVE TO SIGNALS.

08:37:19 10 **MR. SCHERKENBACH:** YES.

11 **THE COURT:** NOW, IF THAT'S THE CASE, THEN "SIGNALS"
12 HAS NOT BEEN DEFINED TO BE EXCLUSIVE TO "CURRENT."

13 **MR. SCHERKENBACH:** CORRECT.

14 **THE COURT:** AND THAT'S WHERE I THINK WE ARE BACK TO
08:37:34 15 THE SAME ISSUE AS IN MOTION NO. 5. IF HE SAYS THAT A PERSON
16 OF ORDINARY SKILL IN THE ART WOULDN'T UNDERSTAND "SIGNAL" TO
17 MEAN "CURRENT" OR "VOLTAGE," WHICH HE'S NOT SAYING.

18 **MR. JACOBS:** TRUE.

19 **THE COURT:** RIGHT? WHAT IS HE SAYING?

08:38:05 20 **MR. JACOBS:** HE'S GOING TO -- IF HE'S PRESSED ON THE
21 ISSUE, HE IS GOING TO SAY, FIRST OF ALL, "SIGNAL" IS
22 IRRELEVANT BECAUSE IT IS THE SIGNAL THAT IS OUTSIDE OF THE
23 CONTROLLER.

24 THAT'S GOING TO BE THE FIRST POSITION. BUT I'M SURE IF
08:38:17 25 HE'S PUSHED THAT HE WOULD ACKNOWLEDGE THAT IT COULD BE VOLTAGE

08:38:21 1 OR CURRENT.

2 THE COURT: OKAY.

3 MR. JACOBS: OKAY?

4 THE COURT: IS THIS SIGNAL THE CURRENT LIMIT SIGNAL?

08:38:29 5 MR. JACOBS: IT'S A DIFFERENT SIGNAL, YOUR HONOR.

6 THE COURT: OH. SO IS JUDGE WARE NOT TALKING ABOUT
7 THAT PART AT ALL?

8 MR. JACOBS: THE TERM "SIGNAL" WAS NOT CONSTRUED.
9 "CURRENT LIMIT" --

08:38:41 10 THE COURT: I KNOW THAT.

11 MR. JACOBS: "CURRENT LIMIT ADJUSTED SIGNAL" WAS
12 CONSTRUED. THAT IS, IN OUR VIEW, A DIFFERENT SIGNAL. AND
13 THAT IS WHAT DR. WEI WAS GOING TO EXPLAIN.

14 THE COURT: I AM SORRY. WHAT ARE YOU SAYING WAS
08:38:54 15 CONSTRUED IN --

16 MR. JACOBS: BY AGREEMENT OF THE PARTIES, "CURRENT
17 LIMIT ADJUSTMENT SIGNAL."

18 THE COURT: SO THAT NEVER BECAME PART OF HIS
19 CONSTRUCTION.

08:39:02 20 MR. JACOBS: ACTUALLY, WHEN THE PARTIES AGREE TO
21 CONSTRUCTIONS, IT DOES BECOME PART OF THE CONSTRUCTION.

22 THE COURT: WELL, THEN, I'LL LOOK AT THE ORDER AGAIN.
23 BUT HE DOESN'T SAY -- BUT YOU ARE SAYING THAT "CURRENT
24 LIMIT ADJUSTMENT SIGNAL" IS NOT THE, QUOTE, "ELECTRICAL
08:39:17 25 SIGNALS."

08:39:18 1 **MR. JACOBS:** ONCE IT'S INSIDE THE CONTROLLER, THINGS
2 HAPPEN. THERE'S A DIFFERENT SIGNAL. THEY HAVE DIFFERENT
3 PROPERTIES.

4 **THE COURT:** SO WE HAVE SIGNALS.

08:39:25 5 **MR. JACOBS:** (NODS HEAD).

6 **THE COURT:** OKAY. BUT THAT IS -- THAT IS THE SIGNAL
7 WE ARE DEALING WITH HERE?

8 **MR. JACOBS:** THE SAME SIGNAL, THEORETICALLY, IS
9 PROPAGATING THROUGHOUT THE CIRCUIT, YES.

08:39:33 10 **THE COURT:** OKAY. AND HE IS GOING TO SAY THAT PEOPLE
11 WOULDN'T CONSTRUE THAT -- WOULDN'T UNDERSTAND THAT TO COVER
12 "VOLTAGE"?

13 **MR. JACOBS:** THE WORD "SIGNAL" AS USED IN THE CLAIM,
14 AGAIN, IS OUTSIDE OF THE CONTROLLER. HE IS GOING TO SAY AT
08:39:47 15 THAT POINT IN TIME IT COULD BE VOLTAGE OR CURRENT, I WOULD
16 IMAGINE.

17 WHEN YOU GET TO THE -- THE SIGNAL INSIDE OF THE CURRENT,
18 AND WE'RE GETTING TO THE COMPARATOR, ALL HE'S SAYING IS THAT
19 DR. KELLEY HAS TESTIFIED UNDER THE DOCTRINE OF EQUIVALENTS
08:40:01 20 THAT A VOLTAGE COMPARATOR AND A CURRENT COMPARATOR ARE THE
21 SAME THING.

22 HE'S GOING TO SAY HE WOULD DISAGREE WITH THAT. HE THINKS
23 A VOLTAGE COMPARATOR IS DIFFERENT THAN A CURRENT COMPARATOR.

24 **THE COURT:** IF THAT'S ALL THAT WAS GOING TO HAPPEN,
08:40:12 25 THAT MIGHT BE OKAY. BUT THIS DOESN'T SAY "OUTSIDE SIGNAL."

08:40:17 1 IT SAYS: "RESPONSIVE TO ELECTRICAL SIGNALS GENERATED
2 WITHIN THE POWER SUPPLY CONTROLLER."

3 MR. JACOBS: IT'S GOING TO HAVE TO BE WITHIN THE
4 CONTEXT. WE COULDN'T PUT THE ENTIRETY OF HIS TESTIMONY IN
08:40:27 5 THIS --

6 THE COURT: NO. NO. THIS ISN'T TESTIMONY. THIS IS
7 JUDGE WARE. HIS CONSTRUCTION IS TALKING ABOUT "A SIGNAL
8 GENERATED WITHIN," NOT OUTSIDE.

9 MR. JACOBS: FOR WHICH TERM, YOUR HONOR?

08:40:38 10 THE COURT: "CONTROL CIRCUIT."

11 MR. JACOBS: FOR "CONTROL CIRCUIT."

12 THE COURT: RIGHT.

13 MR. JACOBS: ABSOLUTELY.

14 THE COURT: WELL, THEN, I'M GOING TO HEAR FROM
08:40:46 15 MR. SCHERKENBACH.

16 MR. SCHERKENBACH: SO, YOUR HONOR, IF I MAY, A COUPLE
17 THINGS. FIRST OF ALL, ON THE TECHNICAL POINT, YOU ASKED THE
18 QUESTION WHETHER THE CURRENT LIMIT ADJUSTMENT SIGNAL IS PART
19 OF THE CONTROL CIRCUIT.

08:40:59 20 THE COURT: RIGHT.

21 MR. SCHERKENBACH: IT IS.

22 THE COURT: OKAY.

23 MR. SCHERKENBACH: IN FACT, IF YOU LOOK AT
24 JUDGE WARE'S OPINION, EVEN WHEN HE'S TALKING ABOUT THE
08:41:06 25 RATIONALE FOR HIS CONSTRUCTION OF "CURRENT LIMIT," HE ACTUALLY

08:41:12 1 BEGINS -- THIS IS IN THE THIRD CLAIM CONSTRUCTION ORDER. IT'S
2 THE DOCKET ENTRY 148.

3 HE ACTUALLY SAYS (AS READ):

4 "THE CONTROL CIRCUIT GENERATES THE SWITCHING WAVEFORM
08:41:23 5 TO CONTROL THE POWER SWITCH IN RESPONSE TO CURRENT
6 LIMIT ADJUSTMENT SIGNAL 315."

7 SO THERE ISN'T ANY QUESTION THE CURRENT LIMIT ADJUSTMENT
8 SIGNAL IS PART OF THE CONTROL CIRCUIT.

9 THERE ISN'T ANY QUESTION THAT SIGNAL IS A -- IT'S A
08:41:39 10 SIGNAL. IT DOESN'T SAY "VOLTAGE" OR "CURRENT." AND,
11 ACTUALLY, IN THE EXAMPLE IN THE PATENT IT IS A VOLTAGE.

12 SO -- SO EVERYTHING WE ARE TALKING ABOUT IS INSIDE THE
13 CHIP. THE DEFINITION -- THE AGREED CONSTRUCTION OF "CURRENT
14 LIMIT ADJUSTMENT SIGNAL" IS:

08:41:53 15 "A SIGNAL THAT IS TO ADJUST OR VARY THE CURRENT LIMIT
16 VALUE."

17 THAT'S THE AGREED CONSTRUCTION: "A SIGNAL." DOESN'T HAVE
18 TO BE CURRENT. DOESN'T HAVE TO BE VOLTAGE.

19 **MR. JACOBS:** WELL, IT'S THE CURRENT LIMIT VALUE.

08:42:08 20 **THE COURT:** JUST A MOMENT.

21 **MR. SCHERKENBACH:** IF I COULD JUST FINISH.

22 **MR. JACOBS:** SURE.

23 **MR. SCHERKENBACH:** THE "CONTROL CIRCUIT"
24 CONSTRUCTION, AS YOU HAVE ALREADY RECOGNIZED, JUST REFERS TO
08:42:15 25 "SIGNALS," NOT "CURRENT" OR "VOLTAGE." OKAY?

08:42:19 1 AND THE OTHER THING, AS TO WHAT DR. WEI IS REALLY GOING TO
2 ARGUE, YOU REALLY NEED TO SEE HIS SLIDES (INDICATING).
3 BECAUSE THERE ARE THREE IN PARTICULAR THAT I --

4 **THE COURT:** OKAY.

08:42:27 5 **MR. SCHERKENBACH:** MAY I HAND THEM UP? THANK YOU.

6 **THE COURT:** YES. OR, I GUESS THERE'S NO WAY TO PUT
7 THEM UP, SO IF YOU WANT TO HAND THEM --

8 **MR. SCHERKENBACH:** WELL, ACTUALLY, THEY CAN PUT THEM
9 UP.

08:42:36 10 **MR. JACOBS:** SURE.

11 **THE COURT:** WELL, THAT IS ALL RIGHT. I'LL LOOK AT
12 THEM.

13 (DOCUMENT HANDED UP TO THE COURT)

14 **MR. SCHERKENBACH:** I'VE HANDED YOU THE WHOLE SET ON
08:42:43 15 '908. BUT THERE ARE THREE IN PARTICULAR I WOULD LIKE TO
16 ADDRESS YOU TO. OKAY?

17 **THE COURT:** OKAY.

18 **MR. SCHERKENBACH:** 494. ACTUALLY, I DON'T KNOW IF
19 YOUR CLERK WOULD LIKE A SET.

08:42:54 20 **THE COURT:** THAT'S OKAY.

21 **MR. SCHERKENBACH:** 494.

22 **THE COURT:** I'LL TELL YOU WHAT. MS. LUCERO, TAKE
23 THAT. SO AS LONG AS SHE'S HERE, SHE MAY AS WELL LOOK AT THAT.
24 IT'S ALL RIGHT. SHE'LL GIVE IT TO HER.

08:43:05 25 ALL RIGHT. GO AHEAD.

08:43:08 1 **MR. SCHERKENBACH:** SO IF YOU'RE ON 494 --

2 **THE COURT:** I AM.

3 **MR. SCHERKENBACH:** I'M SORRY ABOUT THAT. THEY'RE
4 PRESENTING THIS IN THE CONTEXT OF EQUIVALENCE, BUT THAT IS
08:43:15 5 NEITHER HERE NOR THERE.

6 **THE COURT:** UH-HUH.

7 **MR. SCHERKENBACH:** UNDER "NOT THE SAME WAY," THE
8 CLAIMS REQUIRE THAT THE VALUE USED AND ADJUSTED IS THE CURRENT
9 PASSING THROUGH THE POWER SWITCH.

08:43:30 10 THE CLAIMS REQUIRE NO SUCH THING, EITHER ON THEIR FACE OR
11 AS A RESULT OF THE CLAIM CONSTRUCTION. RIGHT?

12 THE CLAIM SAYS:

13 "THE CURRENT LIMIT ADJUSTMENT SIGNAL IS USED TO
14 ADJUST THE CURRENT LIMIT."

08:43:43 15 AND THAT SIGNAL IS NOT LIMITED TO CURRENT OR VOLTAGE.

16 THEN, THE NEXT BULLET:

17 "THE VOLTAGE COMPARATOR IN FAIRCHILD PRODUCTS
18 COMPARES TWO VOLTAGES."

19 THEY ARE ARGUING A VOLTAGE COMPARATOR IS OUTSIDE THE SCOPE
08:43:59 20 OF THE CLAIM. RIGHT?

21 **THE COURT:** WELL, YES, THEY ARE. I MEAN, THAT IS
22 THEIR DEFENSE, BUT THE QUESTION --

23 **MR. JACOBS:** THAT IS OUR NONINFRINGEMENT ISSUE,
24 YOUR HONOR, AND HAS BEEN --

08:44:11 25 **THE COURT:** EXCUSE ME. EVERYBODY CANNOT TALK AT

08:44:15 1 ONCE, AND PARTICULARLY GIVEN THAT WE ARE PRESSED FOR TIME.

2 ALL RIGHT. THEIR FIRST POINT IS THEY CAN ARGUE THEY HAVE
3 GOT A VOLTAGE COMPARATOR, AND IT IS NOT INFRINGING. BUT THEY
4 CAN'T ARGUE A CONSTRUCTION DIFFERENT THAN JUDGE WARE'S. OKAY?

08:44:31 5 SO THEN, THE QUESTION IS WHETHER THAT TOP BULLET: "THE
6 CLAIMS REQUIRE" ALL RIGHT -- "THAT THE VALUE USED AND ADJUSTED
7 IS THE CURRENT PASSING THROUGH THE POWER SWITCH WHEN THE POWER
8 SWITCH TURNS OFF."

9 NOW, WHERE THAT FITS INTO ALL THIS, AGAIN, EVEN THOUGH
08:44:54 10 SOMETHING IS CALLED A "CURRENT ADJUSTMENT SIGNAL," IT'S
11 APPARENTLY TELLING SOMETHING TO ADJUST SOMETHING BASED ON
12 SOMETHING IT'S GETTING IN, WHICH ACCORDING TO THE CONSTRUCTION
13 THAT WE HAVE SO FAR, DOESN'T HAVE TO BE CURRENT.

14 MR. SCHERKENBACH: YES.

08:45:09 15 THE COURT: THAT'S THE POINT?

16 MR. SCHERKENBACH: YEAH. YES.

17 THE COURT: OKAY.

18 MR. JACOBS: YOUR HONOR --

19 MR. POLLACK: AND I -- I BELIEVE YOU ALREADY -- YOU
08:45:15 20 ALREADY DECIDED IN THE CONTEXT OF MOTION IN LIMINE NO. 5 THAT
21 THEY CAN'T ARGUE A CURRENT COMPARATOR IS REQUIRED.

22 THE COURT: CORRECT. ALL RIGHT.

23 MR. SCHERKENBACH: IF YOU LOOK AT THEIR NEXT SLIDE
24 (INDICATING) --

08:45:27 25 THE COURT: OKAY.

08:45:27 1 **MR. SCHERKENBACH:** -- THAT IS WHAT THEY ARE ARGUING.

2 **THE COURT:** OKAY. THAT IS AN EQUIVALENCY ARGUMENT
3 HERE.

4 **MR. SCHERKENBACH:** THERE IS NO RELEVANCE. THIS IS
08:45:36 5 COMPLETELY IRRELEVANT (INDICATING), UNLESS THE CLAIM REQUIRES
6 A CURRENT COMPARATOR. AND THEN, THEY WOULD SAY: "WELL, WE
7 HAVE A VOLTAGE COMPARATOR, AND SO THAT CAN'T BE EQUIVALENT TO
8 THE THING THAT IS LITERALLY REQUIRED, WHICH IS A CURRENT
9 COMPARATOR."

08:45:47 10 OTHERWISE, THIS ARGUMENT IS (INDICATING), IT'S NEITHER
11 HERE NOR THERE.

12 **THE COURT:** WELL, DR. KELLEY APPARENTLY DID MAKE AN
13 EQUIVALENCY OR DID OFFER AN EQUIVALENCY OPINION.

14 **MR. SCHERKENBACH:** HE DID.

08:46:02 15 **THE COURT:** ALL RIGHT. WELL, WHY WAS HE DOING IT IF
16 THERE WAS NO REASON TO DO IT?

17 **MR. SCHERKENBACH:** IT'S RESPONSIVE TO THEIR ARGUMENT.
18 HE SAYS, "LOOK, THIS CLAIM DOESN'T REQUIRE A CURRENT
19 COMPARATOR. IN FACT, THAT'S NOT EVEN SHOWN IN THE PATENT.
08:46:14 20 BUT IF IT WERE, IF DR. WEI'S CLAIM CONSTRUCTION IS CORRECT, IT
21 DOESN'T MATTER. IT IS STILL EQUIVALENT."

22 **THE COURT:** OKAY. WELL, I HAVE ALREADY RULED HE
23 CAN'T ARGUE IT NEEDS A CURRENT COMPARATOR. THEN, THE QUESTION
24 IS: HOW DOES THIS OPINION WORK AT ALL IF IT DOESN'T REQUIRE A
08:46:31 25 CURRENT COMPARATOR?

08:46:32 1 **MR. SCHERKENBACH:** YES.

2 **MR. JACOBS:** SURE. MAY I RESPOND BRIEFLY?

3 **THE COURT:** YES, YES.

4 **MR. JACOBS:** SO THE FIRST BULLET POINT IN 494 COMES
08:46:39 5 DIRECTLY FROM JUDGE WARE'S CLAIM CONSTRUCTIONS. JUDGE WARE
6 HAS SAID THAT A CURRENT LIMIT MUST REQUIRE A CURRENT LIMIT
7 VALUE AS PART --

8 **THE COURT:** WAIT A MINUTE.

9 **MR. JACOBS:** OKAY.

08:46:51 10 **THE COURT:** YOU CAN'T SAY "IT COMES FROM." IT'S
11 EITHER HIS CONSTRUCTION OR IT ISN'T.

12 **MR. JACOBS:** IT'S ADOPTED. IT'S ADOPTED AND BASED ON
13 HIS CLAIM CONSTRUCTION.

14 **THE COURT:** THAT IS WHAT I'M NOT SURE YOU CAN DO.

08:47:03 15 "THE CLAIMS REQUIRE THAT THE VALUE USED" IS THE CURRENT.
16 OKAY. WELL, AS I UNDERSTAND IT, SOMEWHERE THE VOLTAGE
17 GETS TURNED INTO CURRENT, AND THEN IT GETS COMPARED HERE?

18 **MR. JACOBS:** RIGHT.

19 **MR. SCHERKENBACH:** ACTUALLY, THE OTHER WAY. THE
08:47:17 20 VALUE OF THE CURRENT GETS REPRESENTED AS A VOLTAGE.

21 **THE COURT:** OKAY.

22 **MR. SCHERKENBACH:** YES.

23 **THE COURT:** ALL RIGHT.

24 **MR. SCHERKENBACH:** THAT IS THE WAY IT'S ACTUALLY
08:47:23 25 IMPLEMENTED.

08:47:25 1 **THE COURT:** WELL, IS POINT NO. 1 INCONSISTENT WITH
2 WHAT JUDGE WARE FOUND? IT MAY NOT BE. IF THE ULTIMATE VALUE
3 IS CURRENT, AND THEN IT TURNS INTO VOLTAGE, IS THAT --

4 **MR. JACOBS:** YES.

08:47:51 5 **THE COURT:** OKAY.

6 **MR. JACOBS:** THAT IS WHAT HE SAID.

7 **THE COURT:** SO, ALL RIGHT. SO THAT MIGHT NOT BE
8 INCONSISTENT. JUST A MINUTE.

9 LET'S SEE. WHICH ORDER. "CURRENT LIMIT," I THINK WAS IN
08:48:15 10 HIS THIRD ORDER.

11 **MR. SCHERKENBACH:** IT'S IN THE THIRD ORDER,
12 YOUR HONOR.

13 **THE COURT:** I HAVE IT, YEAH.

14 **MR. SCHERKENBACH:** PAGES 4 THROUGH 5.

08:48:22 15 **THE COURT:** RIGHT, OKAY.

16 ALL RIGHT. CONSTRUED "CURRENT LIMIT" TO MEAN, QUOTE, "A
17 VALUE OF CURRENT THAT CAN BE USED BY THE CONTROL CIRCUIT TO
18 TURN OFF THE POWER SWITCH WHEN THE AMOUNT OF CURRENT PASSING
19 THROUGH THE POWER SWITCH REACHES THE THRESHOLD."

08:48:51 20 ALL RIGHT. SO HOW -- ALL RIGHT. SO HOW IS BULLET NO. 1
21 DIFFERENT THAN THAT? I'M ASKING.

22 **MR. JACOBS:** YOUR HONOR, WE BELIEVE THAT IT --

23 **THE COURT:** NOT YOU.

24 **MR. JACOBS:** OKAY.

08:48:59 25 **THE COURT:** I KNOW YOU THINK IT'S THE SAME. I'M

08:49:01 1 ASKING MR. SCHERKENBACH.

2 MR. SCHERKENBACH: BECAUSE THE BULLET NO. 1 SAYS THAT
3 THE VALUE USED AND ADJUSTED --

4 THE COURT: AH.

08:49:11 5 MR. SCHERKENBACH: -- IS THE CURRENT. THE CLAIM --

6 THE COURT: OKAY.

7 MR. SCHERKENBACH: RIGHT?

8 THE COURT: IT'S "AND ADJUSTED."

9 MR. SCHERKENBACH: YES.

08:49:17 10 THE COURT: IT IS "THE ADJUSTED." BECAUSE WHAT
11 HAPPENS IS SOMETHING'S GETTING ADJUSTED HERE. WHAT'S GETTING
12 ADJUSTED?

13 MR. SCHERKENBACH: ULTIMATELY, THE CURRENT LIMIT
14 ITSELF, WHICH IS THE VALUE, GETS ADJUSTED. BUT WHAT IS USED
08:49:33 15 TO ADJUST IT IS A VOLTAGE -- IS ACTUALLY TWO VOLTAGES. ONE
16 REPRESENTING THE CURRENT THROUGH THE SWITCH, THE OTHER
17 REPRESENTING THE -- THE CURRENT LIMIT.

18 THE COURT: ALL RIGHT.

19 MR. SCHERKENBACH: SO --

08:49:47 20 THE COURT: BUT THEY DO USE CURRENT, DON'T THEY? OR
21 NOT?

22 MR. SCHERKENBACH: YOU USE -- YES. YOU USE BOTH.
23 YOU USE CURRENT AND VOLTAGE. I MEAN, THAT IS REALLY OUR
24 POINT. AND THERE'S --

08:49:59 25 THE COURT: WELL, THEN, ARE YOU OBJECTING THAT THE

08:50:01 1 VALUE USED -- WHEN THEY SAY THE VALUE USED IS CURRENT, THAT'S
2 WRONG? BECAUSE IT'S IN JUDGE WARE'S. HE SAYS: "A VALUE OF
3 CURRENT THAT CAN BE USED."

4 MR. SCHERKENBACH: IT CAN BE USED BY THE CONTROL
08:50:12 5 CIRCUIT.

6 THE COURT: RIGHT.

7 MR. SCHERKENBACH: AND THE WAY -- THE WAY IT IS USED
8 IS IN THE FORM OF A VOLTAGE. AND THAT WAS NOT --

9 THE COURT: WELL, THAT MAY BE THE CASE, BUT IS WHAT
08:50:22 10 IS WRITTEN HERE INCONSISTENT?

11 MR. SCHERKENBACH: I THINK IT IS, BECAUSE, AGAIN,
12 THIS SAYS THAT THE VALUE USED AND ADJUSTED IS THE CURRENT
13 PASSING THROUGH THE POWER SWITCH. THAT IS NOT WHAT THE CLAIM
14 CONSTRUCTION SAYS.

08:50:38 15 THE COURT: OKAY. WELL, THEN, WHAT IF YOU JUST USED
16 JUDGE WARE'S CONSTRUCTION IN PLACE OF THAT FIRST BULLET?

17 MR. JACOBS: I THINK WE COULD DO THAT, YOUR HONOR,
18 ABSOLUTELY. THAT AND A CURRENT LIMIT ADJUSTMENT SIGNAL. BOTH
19 OF THOSE CONSTRUCTIONS, I THINK, ARE GOING TO BE CONSISTENT
08:50:53 20 WITH DR. WEI'S OPINION.

21 THE COURT: WELL, IF YOU WANT TO -- SO THAT YOU DON'T
22 REWRITE IT AND WE DON'T GET INTO SOMEONE ARGUING YOU ARE
23 REWRITING IT IN A WAY THAT HE DIDN'T INTEND IT --

24 MR. JACOBS: UH-HUH.

08:51:07 25 THE COURT: -- I THINK THAT WOULD BE OKAY.

PROCEEDINGS

08:51:08 1 **MR. JACOBS:** OKAY.

2 **THE COURT:** AND THEN, YOU KEEP SAYING "VOLTAGE" IS A

3 "CURRENT."

4 **MR. JACOBS:** OKAY. WE CAN DO THAT.

08:51:12 5 **THE COURT:** ALL RIGHT. BUT THAT IS ONLY AS TO THAT

6 SLIDE.

7 HOW ABOUT THE OTHERS?

8 **MR. SCHERKENBACH:** WELL, THERE ARE OTHER DR. WEI

9 SLIDES. ACTUALLY, I THINK MR.-- YEAH, MR. POLLACK IS GOING TO

08:51:22 10 DEAL WITH THOSE, IF HE CAN.

11 THEY'RE NOT IN THE SET THAT I HANDED UP (INDICATING).

12 THESE ALL PERTAIN TO THE CLAIM CONSTRUCTION ISSUE.

13 **THE COURT:** ALL RIGHT. SHOULD I HOLD ONTO THIS,

14 OR --

08:51:31 15 **MR. JACOBS:** YOU CAN HOLD ONTO IT, IF YOU WANT,

16 YOUR HONOR.

17 **THE COURT:** DOES SOMEBODY NEED IT?

18 **MR. SCHERKENBACH:** NO, WE DON'T NEED IT. IT MIGHT BE

19 USED --

08:51:38 20 **THE COURT:** OKAY.

21 **MR. JACOBS:** YES.

22 **THE COURT:** I THINK I'LL KEEP IT WITH THE

23 EVER-GROWING PILE ON THIS PARTICULAR ISSUE.

24 **MR. SCHERKENBACH:** ALL RIGHT.

08:51:45 25 **THE COURT:** ALL RIGHT, THANK YOU.

08:51:46 1 WELL, IS MR. POLLACK GOING TO ADDRESS THIS OTHER MATTER OR
2 ARE WE WAITING ON THAT?

3 MR. SCHERKENBACH: NO, I THINK HE IS, YOUR HONOR.

4 THE COURT: OKAY.

08:51:59 5 MR. POLLACK: YOUR HONOR, I UNDERSTAND WE ONLY HAVE A
6 FEW MINUTES. AND SO WE HAVE TWO CATEGORIES OF OBJECTIONS TO
7 WHAT WE ANTICIPATE IS GOING TO BE DR. WEI'S TESTIMONY.

8 AND THE FIRST, WE UNDERSTAND THAT -- WE GOT SOME SLIDES
9 ABOUT THIS, AND I HAVE AN EXEMPLAR.

08:52:17 10 AND OUR CONCERN DOESN'T GO JUST TO THE SLIDES. IT GOES TO
11 THE SUBJECT MATTER OF THE TESTIMONY THAT THE SLIDES ARE
12 SUPPOSED TO BE IN SUPPORT OF.

13 AND THIS HAS TO DO WITH DR. WEI TESTIFYING ABOUT CHANGES
14 MADE TO THE DATA BEFORE HE GOT HIS REPORT AND THINGS THAT
08:52:36 15 HAPPENED OUTSIDE OF HIS KNOWLEDGE THAT HE HAS HAD NO KNOWLEDGE
16 OF AT THE TIME HE DID HIS REPORT, AND, IN FACT, DIDN'T HAVE
17 ANY KNOWLEDGE OF UNTIL A FEW WEEKS AGO.

18 AND IT APPEARS TO US THAT THEY WANT HIM TO COME IN AND
19 TESTIFY THAT: "WELL, NOW I KNOW ABOUT ALL THOSE CHANGES THAT
08:52:52 20 OCCURRED, AND HERE'S WHY THEY'RE NOT SIGNIFICANT."

21 AND THOSE ARE NOT OPINIONS THAT HE HAD AT THE TIME HE DID
22 HIS REPORT. THEY ARE NOT OPINIONS THAT HE HAD AT THE TIME HE
23 WAS DEPOSED. AND WE DON'T THINK IT IS APPROPRIATE UNDER RULE
24 26 TO HAVE HIM COME IN AND PROVIDE NEW OPINIONS ON THE
08:53:09 25 RELIABILITY OF THE TESTING THAT HE DID NOT PROVIDE DURING

08:53:12 1 DISCOVERY.

2 **THE COURT:** LET ME JUST SEE IF I'VE GOT IT CLEAR. HE
3 OFFERED AN OPINION BASED ON HIS UNDERSTANDING OF WHAT WAS
4 DONE, AND WHAT WAS DONE WAS DIFFERENT THAN WHAT HE UNDERSTOOD?

08:53:24 5 **MR. POLLACK:** CORRECT, YOUR HONOR. HE -- HE RELIED
6 ON SOME -- AS WE HAVE LEARNED, SOME POWERPOINTS THAT COLLECTED
7 SOME DATA.

8 AND, HE -- HE HAD AN UNDERSTANDING AT THE TIME OF WHAT HE
9 THOUGHT THAT DATA WAS.

08:53:38 10 **THE COURT:** WELL, WHAT DID HE THINK IT WAS?

11 **MR. POLLACK:** HE THOUGHT IT WAS A COLLECTION OF
12 TESTING THAT WAS ALL DONE ON A SINGLE DAY.

13 **THE COURT:** AS OPPOSED TO DIFFERENT DAYS?

14 **MR. POLLACK:** OVER DIFFERENT DAYS, AND IT HAD VARIOUS
08:53:52 15 SCREENSHOTS THAT WERE PUT TOGETHER BY, YOU KNOW, MR. HUANG,
16 AND, YOU KNOW, CREATED A PICTURE OF RESULTS THAT WERE NOT THE
17 ACTUAL RAW RESULTS.

18 **THE COURT:** ALL RIGHT, BUT THE DATE IS THE SAME. IN
19 OTHER WORDS, THE FORM THAT HE GOT IT IN MAY BE DIFFERENT, BUT
08:54:09 20 THE INFORMATION THAT WAS ON THE DOCUMENTS IS THE SAME, IS IT
21 NOT?

22 **MR. POLLACK:** NOT -- NOT IN ALL CASES, NO.

23 **THE COURT:** WHERE DID IT DIFFER? NUMERICALLY IT
24 DIFFERED?

08:54:21 25 **MR. POLLACK:** SO THE ISSUE IS, YOUR HONOR, THERE IS A

08:54:23 1 NUMBER OF DIFFERENT TEST RESULTS, AND THERE IS A NUMBER OF
2 DIFFERENT WAYS TO REPRESENT THAT DATA.

3 AND WHAT HE GOT WAS POWERPOINT SLIDES THAT HAD VARIOUS
4 SCREENSHOTS COLLECTED AND ANNOTATED, AND COMMENTED ON THAT
08:54:43 5 WERE PRESENTED TO HIM AS IF THIS WAS A SINGLE COLLECTION OF
6 MATERIAL THAT HAD BEEN ALL EXTRACTED OR CAPTURED ON A SINGLE
7 DAY.

8 **THE COURT:** AND, DOES YOUR EXPERT THINK THAT'S
9 SIGNIFICANT, THAT IT WAS CAPTURED ON DIFFERENT DAYS AS OPPOSED
08:54:59 10 TO A SINGLE DAY?

11 **MR. POLLACK:** WELL, IT'S SIGNIFICANT THAT THE WAY IN
12 WHICH THE DATA WAS REPRESENTED AND THE WAY IN WHICH IT WAS
13 CAPTURED IS NOT THE WAY IN WHICH IT WAS PRESENTED. SO --

14 **THE COURT:** OKAY, I'M LOST. I UNDERSTAND HE GOT
08:55:16 15 INFORMATION. NUMBERS A, B, C, D, WHATEVER THEY ARE. ALL
16 RIGHT.

17 THEN, HE FINDS OUT THAT SOMEBODY TOOK THOSE TESTS ON
18 MULTIPLE DAYS VERSUS A SINGLE DAY. AND HE WANTS TO SAY "I
19 DON'T CARE." ALL RIGHT.

08:55:30 20 I DON'T KNOW. THAT DOESN'T SOUND TERRIBLY SIGNIFICANT TO
21 ME, BUT MAYBE I'M MISSING SOMETHING.

22 **MR. POLLACK:** WELL, IT'S A MATTER OF HAVING -- AND
23 HERE IS SOME EXAMPLES. AND IF I CAN HAND THIS UP --

24 **THE COURT:** OKAY.

08:55:46 25 **MR. POLLACK:** -- OF DR. WEI --

08:55:50 1 (DOCUMENTS HANDED UP TO THE COURT)

2 **THE COURT:** OKAY.

3 **MR. POLLACK:** -- TESTIFYING ESSENTIALLY TO THE
4 HEARSAY THAT HE'S HEARD ABOUT WHY VARIOUS CHANGES WERE MADE
08:56:03 5 BETWEEN THE -- THE DATA BEING CAPTURED AND WHAT HE SAW.

6 **THE COURT:** OKAY. I HAVE TO SAY, THIS SOUNDS MORE
7 LIKE ARGUMENT. AN AWFULLY BIG DEAL WAS MADE, FRANKLY, OVER
8 WHAT COULD HAVE BEEN A SIMPLE MATTER, HAD IT BEEN PRESENTED
9 MORE SIMPLY.

08:56:23 10 IF SOMEBODY JUST SAID TO HIM: "DID YOU TAKE A BUNCH OF
11 SCREENSHOTS?

12 "YES, I DID.

13 "DID YOU KEEP MOST OF THEM?

14 "YES. BUT THERE WERE A COUPLE I DIDN'T KEEP THE ACTUAL
08:56:33 15 PICTURES. I MADE THEM AS PART OF A DISPLAY THAT I SENT TO
16 DR. WEI, OR WHOEVER. MR HUANG, RATHER, BY EMAIL. AND IT WAS
17 THE EXACT PICTURE. IT JUST HAD OTHER THINGS AROUND IT."

18 AND THAT WOULD HAVE BEEN IT, AND IT WOULD HAVE GONE ZIP,
19 ZIP, ZIP.

08:56:48 20 AND THEN, HE WOULD HAVE BEEN SHOWN THE GRAPHS WITHOUT ALL
21 OF THE COMMENTARY ON THEM EXCEPT FOR THE LABEL, WHICH IS FINE.

22 IF EVERYBODY LOOKS AT THESE THINGS THEY ARE NOT GOING TO
23 KNOW WHAT THEY ARE UNLESS IT HAS A LABEL ON IT, SAYING "THIS
24 IS FOR WHATEVER INPUT." "THIS IS FOR A DIFFERENT ONE."

08:57:02 25 IT WOULD HAVE TAKEN ABOUT FIVE MINUTES. AND THEN, WE

08:57:05 1 WOULD HAVE BEEN DONE.

2 INSTEAD, WE SPENT ALL DAY DISCUSSING WHAT WAS HARD ENOUGH
3 WITH SOMEONE WHO HAD TROUBLE WITH AN INTERPRETER. SO WE COULD
4 HAVE GOTTEN THROUGH THIS VERY QUICKLY ON BOTH SIDES.

08:57:20 5 WE DIDN'T. WE SPENT A WHOLE DAY ON THAT.

6 TO THE EXTENT THAT THERE ARE VARIATIONS THAT COULD OCCUR
7 OVER DAYS AND THAT, THUS, THE DAYS COULD MAKE A DIFFERENCE IN
8 SOME WAY, NO ONE HAS SAID THAT YET.

9 TO THE EXTENT SOMEONE PUT SOMETHING IN THE MIDDLE OF THE
08:57:37 10 PICTURE INSTEAD OF KEEPING IT WITHOUT THE EXTRANEOUS MATERIAL
11 AROUND IT, I DON'T SEE HOW THAT CHANGES WHATEVER INFORMATION
12 DR. WEI GOT.

13 IT DOES NOT SOUND IMPROPER. IF SOMEONE WANTS TO ASK HIM
14 CLEARLY, IF YOU WERE GOING TO BRING IT UP ON CROSS, THEY'RE
08:57:55 15 GOING TO BE ABLE TO COME BACK AND SAY: "DID THAT MATTER TO
16 YOU?"

17 AND HE'LL SAY: "NO."

18 NOW, IF YOU ARE NOT GOING TO BRING IT UP ON CROSS, AND
19 THEY WANT TO SAY IT DOESN'T MATTER, I DON'T REALLY THINK IT
08:58:06 20 CHANGES ANYTHING TERRIBLY.

21 SO, I'M -- TO THE EXTENT HE GOT ANYTHING SUBSTANTIVELY
22 DIFFERENT, HE'S GIVING A WHOLE NEW OPINION ON NEW DATA, NEW
23 FIGURES AND NEW TESTS, THAT WOULD BE DIFFERENT.

24 THIS, I THINK, GOES TO THE WEIGHT OF WHATEVER WAS
08:58:20 25 PRESENTED TO HIM. AND I'M GOING TO DENY THE REQUEST TO

08:58:25 1 PRECLUDE HIM FROM GIVING THE OPINION.

2 **MR. POLLACK:** OKAY, YOUR HONOR. WE HAVE ANOTHER
3 CLASS THAT I WOULD LIKE TO BRING UP, WHICH HAS TO DO WITH
4 GRAPHICS THAT WERE CREATED THAT ARE NOT IN DR. WEI'S REPORT.

08:58:38 5 THESE ARE OPINIONS. THESE ARE INTERPRETATIONS OF DATA.
6 THIS IS NOT THE DATA, ITSELF.

7 THESE WERE NOT IN HIS REPORT. AND, THIS IS A PARTICULAR
8 TYPE OF REPRESENTATION OF THE DATA THAT I ACTUALLY ASKED HIM
9 ABOUT IN HIS DEPOSITION.

08:58:53 10 **THE COURT:** OKAY.

11 **MR. POLLACK:** AND HE SAID "WELL, YEAH, I COULD HAVE
12 ASKED FOR THAT. BUT I DIDN'T."

13 **THE COURT:** OH.

14 **MR. POLLACK:** AND NOW THEY WANT TO PRESENT IT TO THE
08:59:01 15 JURY.

16 **THE COURT:** TELL YOU WHAT. I'LL TRADE YOU SLIDES
17 HERE. I'LL GIVE YOU THE OTHER SLIDES BACK.

18 MS. LUCERO, WOULD YOU GIVE THESE BACK TO MR. POLLACK,
19 PLEASE?

08:59:08 20 (DOCUMENT HANDED DOWN)

21 **THE COURT:** OKAY. AND THEN, THE NEW SET YOU ARE
22 TALKING ABOUT --

23 (DOCUMENT HANDED UP TO THE COURT)

24 **THE COURT:** ALL RIGHT. I'M NOT SURE I UNDERSTAND
08:59:15 25 EXACTLY WHAT THE SCOPE OF THIS PARTICULAR CONCERN IS.

08:59:17 1 SO DO YOU WANT TO RESPOND IN SOME WAY TO THAT,
2 MS. ONDRICK? AND THEN, I'LL GET A BETTER IDEA.

3 MS. ONDRICK: SURE. SO THIS IS A PLOT THAT DR. WEI
4 CREATED.

08:59:29 5 THE COURT: OKAY? AND, JUST FOR THE RECORD, THIS
6 WOULD BE --

7 MS. ONDRICK: WHICH ONE DID HE HAND YOU?

8 THE COURT: HE GAVE ME DX 4606 AS A BASIS FOR DDX
9 442. I'M LOOKING AT 442.

08:59:43 10 MS. ONDRICK: OKAY.

11 THE COURT: OKAY.

12 MS. ONDRICK: SO WHAT THIS IS IS A PLOT OF FREQUENCY
13 VERSUS FEEDBACK VALUES THAT COMES FROM THE RAW DATA ON THE
14 OSCILLOSCOPE PLOTS.

08:59:54 15 SO THIS IS SIMPLY TAKING THE FREQUENCY DATA POINTS AT A
16 PARTICULAR FEEDBACK VOLTAGE (INDICATING), PLOTTING A POINT,
17 AND THEN CONTINUING ALONG FOR ALL THE VARIOUS PLOTS THAT WE
18 HAVE FOR A PARTICULAR TEST CONDITION.

19 THE COURT: ALL RIGHT. GRAPHICALLY SHOWING WHOSE
09:00:11 20 RESULT?

21 MS. ONDRICK: THE TESTING THAT MR. CHUEH CONDUCTED.

22 THE COURT: DO YOU UNDERSTAND THIS GRAPH TO BE
23 SOMETHING DIFFERENT THAN THAT? IN OTHER WORDS, A PICTORIAL
24 REPRESENTATION OF EVIDENCE ALREADY IN THE RECORD?

09:00:27 25 MR. POLLACK: NO, YOUR HONOR. MY ISSUE HERE IS THAT

09:00:30 1 IT'S NOT SOMETHING THAT DR. WEI CREATED.

2 **THE COURT:** WELL, I UNDERSTAND HE DIDN'T MAKE IT
3 BEFORE. OKAY. SO, LET ME ASK YOU, IF -- WE'LL GO BACK TO THE
4 OLD DAYS.

09:00:42 5 LET'S SAY HE'S ON THE STAND. SOMEBODY GIVES HIM A PIECE
6 OF PAPER AND DRAWS A VERTICAL AXIS, A HORIZONTAL AXIS, AND
7 ASKS HIM IF HE CAN JUST DRAW ON THERE WHERE THESE VARIOUS
8 FIGURES WOULD SHOW UP.

9 WHAT OBJECTION WOULD YOU HAVE TO THAT?

09:01:01 10 **MR. POLLACK:** MY OBJECTION WOULD BE THAT IT'S BEYOND
11 THE SCOPE OF HIS OPINIONS. HE'S NEVER RENDERED THAT OPINION
12 BEFORE. HE DIDN'T DO IT --

13 **THE COURT:** IS THIS AN OPINION? OR IS IT JUST A
14 DRAWING?

09:01:11 15 **MR. POLLACK:** WELL, IT IS ACTUALLY AN OPINION
16 CHARACTERIZING DATA IN A WAY THAT IS -- IT'S AN
17 INTERPRETATION.

18 **THE COURT:** WELL, YES. THAT'S WHAT I'M ASKING. IS
19 THERE ANY INTERPRETATION HERE? IN OTHER WORDS, IS HE SIMPLY
09:01:24 20 TAKING A NUMBER FROM ONE POINT AND DISPLAYING IT?

21 IS THERE ANY WAY ANYBODY COULD ACTUALLY DISAGREE WITH
22 WHERE HE PUT THESE DOTS?

23 **MR. POLLACK:** WELL --

24 **MS. ONDRICK:** TO MY KNOWLEDGE, NO, YOUR HONOR.

09:01:39 25 **MR. POLLACK:** WELL --

09:01:42 1 **THE COURT:** LET ME ASK -- WAIT. WAIT.

2 **MR. POLLACK:** THE PROBLEM IS I HAVE NO WAY OF KNOWING
3 THAT, BECAUSE I DON'T KNOW HOW THIS WAS CREATED. I DON'T KNOW
4 WHAT PLOTTING THEY DID. IT ACTUALLY LOOKS VERY DIFFERENT FROM
09:01:52 5 THE TYPES OF PLOTS THAT WERE IN HIS ORIGINAL REPORT
6 (INDICATING).

7 **THE COURT:** OKAY. IN OTHER WORDS, HE'S DONE THIS
8 SAME TYPE OF EXERCISE FOR OTHER DATA EARLIER?

9 **MR. POLLACK:** EXACTLY.

09:02:07 10 **THE COURT:** LET ME ASK YOU ABOUT THAT. WHAT
11 PARTICULAR FUNCTION OR BODY OF DATA DID HE DO THIS NEW ONE FOR
12 AS COMPARED TO WHAT HE DID THE OTHER ONES FOR?

13 **MR. POLLACK:** RIGHT. SO WHAT HE DID WAS HE PLOTTED
14 OR HAD PLOTTED FOR HIM A GRAPH OF FREQUENCY VERSUS LOAD.

09:02:28 15 **THE COURT:** OKAY.

16 **MR. POLLACK:** ALL RIGHT? AND HE HAD A DIFFERENT SET
17 OF GRAPHS OF FEEDBACK VERSUS LOAD.

18 AND I ASKED HIM, YOU KNOW, "DID YOU ASK FOR A GRAPH OF
19 FREQUENCY VERSUS FEEDBACK," THE ONE THAT THEY WANT TO PRESENT
09:02:44 20 NOW (INDICATING).

21 AND HE SAID "NO, I DIDN'T."

22 AND I SAID: "COULD YOU HAVE DONE THAT?"

23 AND HE SAID: "YEAH, I COULD HAVE, BUT I DIDN'T THINK IT
24 WAS NECESSARY."

09:02:53 25 AND SO THE CONCERN I HAVE IS I HAD THE OPPORTUNITY TO

09:02:59 1 EXPLORE IN HIS DEPOSITION THE GRAPHS HE DID INCLUDE AND THE
2 ANALYSIS HE DID DO.

3 **THE COURT:** RIGHT. WELL, HOW WERE THESE CREATED?
4 DID YOU ASK HIM THAT? IN OTHER WORDS, HOW THESE ARE CREATED,
09:03:08 5 MR. --

6 **MR. POLLACK:** I NEVER -- WE DIDN'T SEE THIS
7 (INDICATING). THIS WAS NOT IN HIS REPORT.

8 **THE COURT:** NO, NOT THIS ONE. JUST IN GENERAL. IN
9 OTHER WORDS, SOME KIND OF A PROGRAM CREATED THIS THING.

09:03:18 10 **MR. POLLACK:** THERE WAS A -- AND HE SAID EXCEL, IT
11 WAS DONE, USING MICROSOFT EXCEL, I BELIEVE HIS UNDERSTANDING
12 OF THE GRAPHS IN HIS ORIGINAL REPORT WERE.

13 **THE COURT:** WELL, MAYBE IT ISN'T AS SIMPLE AS PUTTING
14 DOTS ON A PAGE. IF IT ISN'T AS SIMPLE AS PUTTING DOTS ON A
09:03:37 15 PAGE, THEN PERHAPS HE SHOULDN'T BE ALLOWED TO USE THIS BECAUSE
16 IT MAY INVOLVE SOME DEGREE OF CREATIVITY AND CALCULATION ON
17 HIS PART.

18 THAT'S WHAT I -- OR ON SOMETHING'S PART. AND SO THAT IS
19 MY ONLY CONCERN. IT'S MORE COMPLICATED THAN IT MIGHT APPEAR
09:04:01 20 AT FIRST BLUSH. SO, YOU KNOW, IF YOU SEE SOME OF THE SIMPLER
21 CHARTS THAT PEOPLE MIGHT SHOW -- LET'S JUST SAY IT'S A
22 POPULATION CHART. AND IT MAY HAVE YEARS ON THE BOTTOM, AND
23 NUMBERS OF PEOPLE GOING UP VERTICALLY. AND YOU JUST FIND A
24 YEAR AND YOU RUN ACROSS, AND THERE YOU ARE. AND YOU PUT A
09:04:21 25 DOT, AND YOU KEEP GOING.

09:04:22 1 AND THEN, YOU CAN SEE IT GOES UP, DOWN, KEEP GOING UP.
2 WHAT'S GOING ON?

3 IF THIS IS A MORE COMPLICATED PROCESS THAN THAT, ALL
4 RIGHT? THEN PERHAPS HE SHOULDN'T BE ALLOWED TO DO IT. SO
09:04:33 5 THAT'S THE QUESTION.

6 **MS. ONDRICK:** IT IS NOT A MORE COMPLICATED PROCESS
7 THAN THAT.

8 **THE COURT:** THAT, I CAN'T TELL. SO HE IS GOING TO BE
9 ALLOWED TO TESTIFY AS TO OTHER GRAPHS. CORRECT? AS FAR AS WE
09:04:45 10 KNOW.

11 **MR. POLLACK:** WELL, THEY DON'T HAVE THEM IN THEIR
12 DEMONSTRATIVES NOW. SO --

13 **MS. ONDRICK:** WE WOULD HAVE TO PUT -- THE DIFFERENCE
14 HERE IS HE WOULD GRAPH -- SO IF YOU LOOK ON YOUR CHART IT'S
09:04:55 15 "FREQUENCY VERSUS FEEDBACK VOLTAGE" (INDICATING).

16 **THE COURT:** ALL RIGHT.

17 **MS. ONDRICK:** THE GRAPH IN HIS REPORT AND WHAT HE
18 WOULD GRAPH WITH THE DATA POINTS IS HE WOULD GRAPH FREQUENCY
19 VERSUS LOAD (INDICATING).

09:05:05 20 **THE COURT:** HE DID GRAPH THOSE.

21 **MS. ONDRICK:** HE DID.

22 **THE COURT:** IS THAT WHAT YOU MEAN BY "HE WOULD"?

23 **MS. ONDRICK:** YES. WE HAVE BOTH. AND SO --

24 **THE COURT:** HE DID. I'M JUST TRYING TO FIGURE OUT
09:05:15 25 YOUR TENSES. HE DID GRAPH THE OTHERS.

09:05:17 1 NOW, HE WOULD TRY TO DO THESE? IS THAT IT? OR -- IN
2 OTHER WORDS, WHAT DID HE DO BEFORE?

3 MS. ONDRICK: BEFORE, FAIRCHILD PROVIDED HIM WITH THE
4 GRAPHS OF THE DATA THAT WERE THE SAME PLOTTING.

09:05:31 5 THE COURT: OH. SOMEBODY DID IT FOR HIM.

6 MR. POLLACK: EXACTLY, YOUR HONOR.

7 MS. ONDRICK: (INAUDIBLE)

8 (REPORTER INTERRUPTION)

9 THE COURT: OH. AND HE CONFIRMED WHAT?

09:05:37 10 MS. ONDRICK: HE CONFIRMED THE POINTS BY LOOKING AT
11 THE GRAPH THAT WAS THERE WITH THE DATA, THE RAW DATA. AND
12 THAT THE POINTS LINED UP.

13 THE COURT: WELL --

14 MS. ONDRICK: AND THAT HE ALSO SAID: "BY LOOKING AT
09:05:49 15 THE PLOT THAT WAS PROVIDED I CAN ALSO TELL YOU WHAT IT WOULD
16 SHOW FOR FREQUENCY VERSUS VOLTAGE BECAUSE OF THE
17 RELATIONSHIP."

18 THE COURT: OKAY, I CAN'T TELL. IF, AGAIN, THIS IS
19 JUST A FANCY, PRETTY WAY OF MAKING A SIMPLE CHART, THEN I
09:06:06 20 DON'T THINK THERE'S A PROBLEM.

21 IF, IN FACT, IT ISN'T THAT, THEN THERE IS A PROBLEM. I
22 CAN'T TELL IF THIS IS AN OPINION. I DON'T EVEN SEE HOW IT'S
23 AN OPINION, BECAUSE HE DIDN'T DO IT. SOMEBODY ELSE DID IT.

24 SO, AT THIS POINT, I THINK WE WOULD HAVE TO WAIT TO SEE
09:06:24 25 WHAT FOUNDATION IS LAID.

09:06:26 1 **MS. ONDRICK:** OKAY.

2 **THE COURT:** OKAY? ALL RIGHT? I CANNOT AT THIS
3 MOMENT RULE ON THIS WITHOUT KNOWING WHAT HE'S GOING TO SAY.
4 HOWEVER, IT IS NOT TO BE SHOWN TO THE JURY UNLESS AND UNTIL HE
09:06:37 5 DOES LAY A FOUNDATION FOR IT, BECAUSE EVEN THOUGH IT IS A
6 DEMONSTRATIVE AND NOT AN -- I BELIEVE IT IS ONLY BEING USED AS
7 A DEMONSTRATIVE. IS THAT RIGHT?

8 **MS. ONDRICK:** THAT'S CORRECT.

9 **THE COURT:** OKAY. EVEN THOUGH IT IS ONLY A
09:06:51 10 DEMONSTRATIVE, IT -- THERE IS AN OBJECTION IN THIS INSTANCE.

11 SO, I'LL JUST PUT IT IN AND ORDER THAT YOU ARE NOT TO SHOW
12 IT UNLESS HE LAYS A FOUNDATION.

13 LET'S GET THE JURY IN, BECAUSE IT'S ALREADY LATE.

14 (THE FOLLOWING PROCEEDINGS WERE HELD IN THE PRESENCE OF
09:07:31 15 THE JURY)

16 **THE COURT:** OKAY, PLEASE BE SEATED. ALL RIGHT. GOOD
17 MORNING, LADIES AND GENTLEMEN. I KNOW WE WERE A LITTLE
18 DELAYED, BUT I WANT YOU TO KNOW WE WERE WORKING OUT HERE,
19 REGARDING SOME OF THE DISPLAYS THAT MAY BE USED IN TESTIMONY
09:08:03 20 COMING UP IN A LITTLE WHILE.

21 WE WEREN'T JUST OUT HERE DRINKING COFFEE AND EATING
22 DOUGHNUTS AND GENERALLY RELAXING.

23 SO, OKAY. NOW, I THINK WE'RE STILL --

24 **MR. SCHERKENBACH:** WE ARE IN THE CROSS EXAMINATION OF
09:08:18 25 MR. HUANG.

09:08:19 1 **THE COURT:** CROSS-EXAMINATION.

2 **MR. JACOBS:** YES.

3 **THE COURT:** OKAY. COULD WE HAVE THE WITNESS BACK ON
4 THE STAND? THANK YOU.

09:08:31 5 ALL RIGHT, SIR. PLEASE COME BACK TO THE STAND. AND YOU
6 MAY SIMPLY TAKE YOUR SEAT, MR. HUANG.

7 PLEASE REMEMBER THAT YOU ARE UNDER THE SAME OATH THAT YOU
8 TOOK YESTERDAY. IT'S NOT NECESSARY TO BE RESWORN, HOWEVER.

9 THANK YOU. ALL RIGHT. THEN, WE WILL CONTINUE WITH THE
09:08:47 10 CROSS EXAMINATION OF W.H. HUANG.

11 **MR. SCHERKENBACH:** THANK YOU, YOUR HONOR.

12 GOOD MORNING, LADIES AND GENTLEMEN.

13 **WEI-HSUAN HUANG, DEFENDANTS' WITNESS, RECALLED**

14 **CROSS EXAMINATION**

09:08:54 15 **BY MR. SCHERKENBACH:**

16 **Q** GOOD MORNING, MR. HUANG.

17 **A** GOOD MORNING.

18 **Q** WHEN WE LEFT OFF YESTERDAY, WE WERE TALKING ABOUT A
19 DECLARATION THAT YOU HAD FILED IN THIS CASE. DO YOU RECALL
09:09:01 20 THAT DISCUSSION?

21 **A** YES.

22 **MR. SCHERKENBACH:** YOUR HONOR, THE PARTIES HAVE
23 AGREED ON THE REDACTED VERSION OF THAT, AND I WOULD LIKE TO
24 MOVE IT INTO EVIDENCE.

09:09:10 25 **THE COURT:** OH, YES.

09:09:11 1 **MR. SCHERKENBACH:** IF I MAY?

2 **THE COURT:** HOLD ON FOR A MINUTE. THAT NUMBER WOULD

3 BE WHAT, THEN?

4 **MR. SCHERKENBACH:** IT IS DX 3485. AND YOU WILL HAVE

09:09:25 5 R.

6 **THE COURT:** ALL RIGHT. LET ME JUST FIND IT ON THE

7 LIST HERE. 3485R IS ADMITTED.

8 (TRIAL EXHIBIT 3485R RECEIVED IN EVIDENCE)

9 **MR. SCHERKENBACH:** THANK YOU, YOUR HONOR.

09:09:36 10 **THE COURT:** THANK YOU.

11 **MR. SCHERKENBACH:** MR. SAYERS, MAY WE HAVE THAT ON

12 THE SCREEN, PLEASE?

13 (DOCUMENT DISPLAYED)

14 **BY MR. SCHERKENBACH:**

09:09:44 15 **Q** YOU DON'T HAVE THERE IN YOUR BOOK, MR. HUANG, BECAUSE IT

16 IS A PARED-DOWN VERSION OF YOUR DECLARATION, OKAY?

17 **A** OKAY.

18 **Q** SO YOU CAN EITHER LOOK UP ON THE BIG SCREEN OR YOU CAN

19 LOOK ON YOUR SCREEN BY YOU.

09:09:55 20 **MR. SCHERKENBACH:** COULD WE HAVE THE NEXT PAGE?

21 **BY MR. SCHERKENBACH:**

22 **Q** I JUST HAVE ONE MORE QUESTION ABOUT THIS. WHEN I ASKED

23 YOU YESTERDAY ABOUT THESE NUMBERED PARAGRAPHS 2 THROUGH 4 --

24 **MR. SCHERKENBACH:** CAN WE JUST PICK -- JUST PICK ONE,

09:10:05 25 MR. SAYERS, AND BLOW IT UP.

09:10:07 1 (DOCUMENT DISPLAYED)

2 **BY MR. SCHERKENBACH:**

3 **Q** OKAY. AND YOU MADE THIS STATEMENT THAT ON A CERTAIN DATE,
4 YOU DIRECTED, SUPERVISED, AND PERSONALLY WITNESSED THE TESTING
09:10:19 5 OF A SERIES OF PARTS, RIGHT (INDICATING)?

6 DO YOU RECALL THAT?

7 **A** YES.

8 **Q** OKAY. AND YOU AGREED YESTERDAY THAT YOU ACTUALLY WERE NOT
9 THERE FOR THE TESTING ON THE DATES INDICATED IN THIS
09:10:35 10 DECLARATION. RIGHT?

11 **A** YES.

12 **Q** YOU ATTENDED SOME LATER TESTING, BUT NOT ON THESE DAYS,
13 RIGHT?

14 **A** YES.

09:10:43 15 **Q** SO WHEN YOU SAID -- I JUST WANT TO MAKE CLEAR WHEN YOU SAY
16 YOU PERSONALLY WITNESSED SOMETHING ON THOSE DAYS, THAT WAS NOT
17 CORRECT AT THE TIME YOU DID YOUR DECLARATION. RIGHT?

18 **A** YES. I MADE A MISTAKE, YES.

19 **Q** ALL RIGHT. NOW, ONE LAST TOPIC ON TESTING, THEN WE WILL
09:11:02 20 MOVE ON TO SOMETHING ELSE. THE ORIGINAL TEST INSTRUCTIONS
21 THAT THE LAWYERS SENT TO YOU ON JULY 25, THEY CONTAINED WHAT
22 WAS CALLED A "TEST 3." DO YOU REMEMBER THAT?

23 **A** YES.

24 **Q** OKAY. AND AT SOME POINT LATER, THOUGH, THE LAWYERS TOLD
09:11:24 25 YOU NOT TO PERFORM TEST 3. TRUE?

09:11:29 1 **A** YES. IT'S TRUE.

2 **Q** BUT YOU DON'T RECALL THE LAWYERS TELLING YOU WHY THEY

3 DIDN'T WANT YOU TO DO TEST 3. RIGHT?

4 **A** YES.

09:11:44 5 **Q** BUT YOU DO KNOW THAT YOU WERE NOT TOLD IT WAS DR. WEI WHO

6 HAD CHANGED HIS MIND AND DECIDED HE DIDN'T WANT TEST 3.

7 RIGHT?

8 **A** YEAH. I -- I WAS NOT TOLD THAT WHO -- WHO DECIDE THIS

9 DECISION. BUT I -- I BELIEVE THAT BECAUSE LAYERS, I THINK,

09:12:00 10 HE'S NOT EXPERTISE. I THINK THIS DECISION SHOULD BE MADE --

11 SHOULD BE MADE BY EXPERT. YEAH.

12 **Q** BUT -- BUT YOU DON'T KNOW, SIR, THE REASON YOU WERE TOLD

13 NOT TO DO TEST 3. RIGHT?

14 **A** YEAH. I DON'T KNOW THE REASONS.

09:12:18 15 **Q** AND, IN FACT, IT WAS YOUR UNDERSTANDING THAT BECAUSE TEST

16 3 HAD ORIGINALLY BEEN REQUESTED IN THE JULY 25 EMAIL THAT CAME

17 FROM THE LAWYERS AND THAT YOU UNDERSTOOD THEY WERE RELAYING

18 FROM DR. WEI, IT WAS YOUR UNDERSTANDING DR. WEI WANTED THE

19 TEST 3 DONE. RIGHT? ORIGINALLY.

09:12:35 20 **A** YEAH. YES.

21 **Q** ALL RIGHT. BUT IT TURNS OUT THAT BEFORE THE LAWYERS TOLD

22 YOU NOT TO DO THAT TEST, IT HAD BEEN DONE FOR ONE PART.

23 RIGHT? TEST 3?

24 **A** YOU MEAN, WE -- YEAH, WE -- WE DID THAT TEST AT THE

09:12:55 25 BEGINNING, YEAH.

09:12:56 1 Q AND -- AND YOU DID THAT TEST -- OR I SHOULD SAY MR. CHUEH
2 PERFORMED TEST 3 ON AT LEAST THE SG6841. RIGHT?

3 A YES.

4 Q BUT YOU DIDN'T TELL THE LAWYERS THAT YOU ACTUALLY HAD
09:13:10 5 CAPTURED DATA FOR THAT TEST FOR THE 6841. TRUE?

6 A YES.

7 Q AND YOU DIDN'T TELL DR. WEI LATER THAT YOU HAD CAPTURED
8 DATA FOR TEST 3 FOR THE 6841. RIGHT?

9 A YEAH. BECAUSE WE DID A TEST, SO WE ABSOLUTELY WILL
09:13:30 10 CAPTURE THOSE SCREENSHOT AND THE WAVEFORM, YES.

11 Q SO THAT'S MY QUESTION. YOU -- YOU HAD THE DATA FOR THAT
12 TEST FOR ONE PART. RIGHT?

13 A YES.

14 Q BUT WHEN YOU LATER TALKED TO DR. WEI -- I BELIEVE IT WAS
09:13:44 15 ON OCTOBER -- OR AUGUST 20TH -- YOU DIDN'T TELL HIM YOU HAD
16 THAT DATA FOR THE TEST 3 TEST. RIGHT?

17 A YES.

18 Q NOW, THIS IS THE LAST TOPIC.

19 YOU TALKED ABOUT SOME DATASHEETS YESTERDAY. DO YOU
09:14:02 20 REMEMBER THAT?

21 A YES.

22 Q AND I HAVE SOME QUESTIONS ABOUT THOSE.

23 A OKAY.

24 MR. SCHERKENBACH: CAN WE HAVE DDX 2002, PLEASE.

09:14:10 25 (DOCUMENT DISPLAYED)

09:14:10 1 **BY MR. SCHERKENBACH:**

2 **Q** THIS IS ONE OF YOUR SLIDES FROM YESTERDAY. DO YOU

3 RECOGNIZE THAT?

4 **A** YES.

09:14:14 5 **Q** AND YOU TALKED ABOUT THE SG5841 AND 5841J DATASHEET.

6 RIGHT?

7 **A** YES.

8 **Q** AND YOU HIGHLIGHTED HERE THIS BULLET.

9 "PROGRAMMABLE PWM FREQUENCY WITH HOPPING," RIGHT?

09:14:33 10 **A** YES.

11 **Q** I WANT TO TALK FIRST ABOUT THE WORD "PROGRAMMABLE."

12 OKAY?

13 **A** OKAY.

14 **Q** THAT JUST MEANS THAT THE USER CAN CHOOSE THE PWM

09:14:41 15 FREQUENCY. RIGHT?

16 **A** YES.

17 **Q** AND, IN FACT, IF YOU GO TO YOUR NEXT SLIDE, DDX 2003 --

18 (DOCUMENT DISPLAYED)

19 **Q** -- THAT'S ACTUALLY WHAT'S DESCRIBED HERE IS THAT BY

09:14:55 20 CHOOSING THE VALUE OF A RESISTANCE, THE USER CAN ACTUALLY

21 CHOOSE WHAT THE PWM FREQUENCY WILL BE (INDICATING). RIGHT?

22 **A** YES.

23 **Q** AND, BY CHOOSING A RESISTOR VALUE, IN PARTICULAR, THE USER

24 CAN CHOOSE WHETHER THE PWM FREQUENCY IS, SAY, 47 KILOHERTZ,

09:15:15 25 109 KILOHERTZ, OR SOMEWHERE IN BETWEEN. RIGHT?

09:15:18 1 **A** YES.

2 **Q** OKAY. AND ONCE THE USER CHOOSES A RESISTOR AND THAT GETS
3 SOLDERED ON THE BOARD, THAT PWM FREQUENCY IS NOT GOING TO
4 CHANGE UNLESS THE RESISTOR GETS CHANGED. RIGHT?

09:15:35 5 **A** ACTUALLY, WHEN USER DECIDE TO PUT SOME CERTAIN RESISTANCE
6 ON THIS BOARD, THEN THEY WILL HAVE A -- WE HAVE A FORMULA
7 THAT USER KNOW THAT THEIR TARGET FREQUENCY IS BI-LEVEL.
8 HOWEVER, WE HAVE A RANGE AROUND THIS TARGET FREQUENCY.

9 SO WE STILL HAVE SOME VARIATION AT LEAST TARGET. AND THAT
09:15:58 10 IS THE TRUE BEHAVIOR.

11 **Q** LET ME REPHRASE, BECAUSE THIS IS THE JITTER POINT WHICH
12 I'M COMING TO. BUT WHEN THE USER WANTS TO CHOOSE WHAT YOU
13 CALL THE "TARGET FREQUENCY," OKAY?

14 **A** YES.

09:16:11 15 **Q** YOU USED THE PHRASE "TARGET FREQUENCY" IN YOUR ANSWER.
16 RIGHT?

17 **A** YES.

18 **Q** OKAY. THE USER CAN CHOOSE THE TARGET FREQUENCY BY
19 SELECTING A RESISTOR VALUE. RIGHT?

09:16:21 20 **A** YES.

21 **Q** AND THAT RESISTOR GETS SOLDERED ON THE PRINTED CIRCUIT
22 BOARD OUTSIDE THE CONTROLLER CHIP. RIGHT?

23 **A** YES.

24 **Q** AND SO UNLESS THE USER GOES BACK IN LATER AND TAKES THAT
09:16:27 25 RESISTOR OFF AND PUTS ANOTHER ONE ON, THAT TARGET FREQUENCY

09:16:31 1 FOR THE PWM IS NOT GOING TO CHANGE. RIGHT?

2 **A** YEAH. THE TARGET IS THAT. THE TARGET, YES.

3 **Q** OKAY. NOW, LET'S GET TO THE OTHER PART OF YOUR POINT, I
4 THINK.

09:16:41 5 **MR. SCHERKENBACH:** CAN WE GO BACK TO 2002?

6 (DOCUMENT DISPLAYED)

7 **BY MR. SCHERKENBACH:**

8 **Q** "HOPPING," "FREQUENCY WITH HOPPING," RIGHT?

9 **A** YES.

09:16:50 10 **Q** AND I BELIEVE YOU SAID -- YOU POINTED OUT THAT WHAT THAT
11 MEANS IN YOUR VIEW IS THE FREQUENCY VARIES DUE TO THE JITTER
12 FUNCTION. TRUE?

13 **A** YES.

14 **Q** BUT YOU WOULD AGREE THAT THE FREQUENCY VARIATION AS A
09:17:08 15 RESULT OF JITTER DOES NOT OCCUR IN RESPONSE TO THE FEEDBACK
16 VALUES. RIGHT?

17 **A** IT -- I'M NOT SO SURE OF WHAT YOU WANT TO -- WHAT YOU
18 MEAN. SORRY.

19 **Q** LET'S TRY TO DO IT WITH REFERENCE TO THE DATASHEET. SO
09:17:24 20 LET'S LOOK AT -- AND, BY THE WAY, THIS DOCUMENT IS IN
21 EVIDENCE, SO IT'S CLEAR, DX 4606, THE DATASHEET.

22 SO LET'S GO TO PAGE 6 OF THE DATASHEET FOR THE 5841, AND
23 5841J. OKAY?

24 **A** YES.

09:17:39 25 (DOCUMENT DISPLAYED)

09:17:40 1 Q YOU ACTUALLY --

2 MR. SCHERKENBACH: THAT'S GOOD RIGHT THERE,
3 MR. SAYERS.

4 BY MR. SCHERKENBACH:

09:17:43 5 Q YOU ACTUALLY HIGHLIGHTED FOR THE JURY, I THINK, SOME OF
6 THE VALUES IN THESE TABLES AT THE TOP? DO YOU REMEMBER THAT?

7 A YES.

8 Q ALL RIGHT. THERE IS ACTUALLY A FIGURE DOWN HERE THAT YOU
9 DIDN'T TALK ABOUT ON DIRECT. ISN'T THAT RIGHT?

09:17:55 10 A YEAH, THIS -- THIS IS ROUGHLY A DESCRIPTION ABOUT THE
11 CENTER TARGET FREQUENCY. HOWEVER, IT WILL HAVE VARIATIONS.

12 SO, BECAUSE IT'S HARD TO DESCRIBE THE VARIATION ON THIS
13 SINGLE PAGE, BECAUSE THIS SINGLE PAGE IS TO DESCRIBE THE
14 FREQUENCY DECREASING BEHAVIOR. BUT OVER RANGE WE HAVE
09:18:19 15 VARIATIONS.

16 Q ALL RIGHT. I JUST WANT TO TALK ABOUT WHAT'S SHOWN IN THE
17 FIGURE. OKAY?

18 A OKAY.

19 Q IN THE FIGURE, THIS SHOWS FREQUENCY VERSUS FEEDBACK
09:18:29 20 VOLTAGE. RIGHT?

21 A YES.

22 Q AND, IT SHOWS AN OSCILLATOR FREQUENCY HERE OF 65 KILOHERTZ
23 FOR ONE -- ONE LEVEL. TRUE?

24 A YES, A TARGET.

09:18:44 25 Q TARGET?

09:18:45 1 **A** YES, TARGET.

2 **Q** AND ANOTHER TARGET AT THE BOTTOM HERE OF 22 KILOHERTZ,
3 RIGHT?

4 **A** YES.

09:18:51 5 **Q** AND, FOR A RANGE OF FEEDBACK SIGNALS ON THE RIGHT SIDE OF
6 THIS FIGURE HERE, IN DX 4606, THE FREQUENCY IS SHOWN AS FIXED.
7 TRUE?

8 **A** IT'S -- ACTUALLY, IT'S NOT FIXED, BECAUSE -- AND ABOVE
9 THERE IS A JITTER RANGE. SO IT'S ACTUALLY -- IT IS A RANGE,
09:19:16 10 WE SAY "RANGE," BUT NOT A FIXED VALUE.

11 **Q** SO THIS REALLY SHOULDN'T BE FLAT; IT SHOULD BE JUMPING UP
12 AND DOWN?

13 **A** YES. THE ACTUAL BEHAVIOR SHOULD BE THAT.

14 **Q** SO THAT FIGURE, HOW WOULD YOU DESCRIBE THAT? IT'S JUST
09:19:29 15 WRONG? IT'S INACCURATE? WHAT?

16 **A** NO, IT'S -- BECAUSE THIS FIGURE, THE PURPOSE IS TO LET
17 CUSTOMER UNDERSTAND FREQUENCY DECREASING. ONLY THIS PURPOSE.
18 BUT THE REAL SITUATION, BECAUSE WE HAD TO DRAW A BAND BECAUSE
19 IT LOOKS NOT -- IN OUR INDUSTRY, NOT USUALLY USE THIS KIND OF
09:19:50 20 A WIDE BAND TO DRAW THIS KIND OF -- YEAH. SO WE ONLY DRAW THE
21 TARGET.

22 BUT, HOWEVER, THE CUSTOMER, THEY KNOW ABOUT WHAT WE WANT
23 TO SHOW, WHAT WE WANT TO EXPLAIN FOR THIS FEATURE.

24 **Q** SO THIS IS THE DATASHEET FOR THE PART, RIGHT? THE 5841?

09:20:07 25 **A** YES.

09:20:08 1 **Q** THERE ARE ALSO APPLICATION NOTES FOR THIS PART, RIGHT?

2 **A** YES.

3 **Q** FOR BOTH PARTS, I SHOULD SAY, 5841 AND 5841J. TRUE?

4 **A** TRUE.

09:20:19 5 **Q** I DON'T THINK YOU -- YOU DIDN'T TALK ABOUT ANY OF THOSE ON

6 YOUR DIRECT, DID YOU? APPLICATION NOTES?

7 **A** APPLICATION, NO. DIRECT, AS IN YESTERDAY, I DON'T TALK

8 ABOUT THE APPLICATION NOTE, YEAH.

9 **Q** SO LET'S TAKE A LOOK AT ONE OF THOSE. DX 2037 IS AN

09:20:36 10 APPLICATION NOTE FOR THE SG5841 AND 5841J. DX2037.

11 **MR. SCHERKENBACH:** I'M NOT ENTIRELY SURE THIS IS IN

12 EVIDENCE. I WOULD LIKE TO MOVE IT IN IF THERE IS NO

13 OBJECTION.

14 **THE COURT:** WHICH NUMBER?

09:20:51 15 **MR. SCHERKENBACH:** DX 2037. 2037.

16 IT IS NOT IN. OKAY.

17 SO I WOULD MOVE THE ADMISSION OF THAT, YOUR HONOR.

18 **THE COURT:** IS THERE ANY OBJECTION TO 2037?

19 **MR. JACOBS:** THERE IS NO OBJECTION, YOUR HONOR.

09:21:00 20 **THE COURT:** ALL RIGHT. THANK YOU.

21 DX 2037 IS ADMITTED.

22 (TRIAL EXHIBIT 2037 RECEIVED IN EVIDENCE)

23 **MR. SCHERKENBACH:** THANK YOU, YOUR HONOR.

24 SO NOW WE CAN HAVE THAT ON THE SCREEN.

09:21:12 25 (DOCUMENT DISPLAYED)

09:21:12 1 **BY MR. SCHERKENBACH:**

2 **Q** SO THIS IS AN APPLICATION NOTE FOR THE SG5841. RIGHT?

3 **A** TRUE.

4 **Q** OKAY. AND, UNDER "FEATURES" IT HAS THAT SAME LANGUAGE
09:21:26 5 FROM THE DATASHEET WHERE IT SAYS "PROGRAMMABLE PWM FREQUENCY
6 WITH HOPPING"?

7 **A** YES.

8 **MR. SCHERKENBACH:** CAN YOU HIGHLIGHT THAT,
9 MR. SAYERS?

09:21:36 10 (DOCUMENT HIGHLIGHTED)

11 **MR. SCHERKENBACH:** OKAY. NOW GO BACK TO THE FULL
12 COVER PAGE.

13 (DOCUMENT DISPLAYED)

14 **BY MR. SCHERKENBACH:**

09:21:41 15 **Q** BUT OVER HERE IN THE DESCRIPTION, YOU SEE THIS SENTENCE IN
16 THE MIDDLE, IT SAYS:

17 "IN NOMINAL LOADING CONDITIONS" --

18 **MR. SCHERKENBACH:** HIGHLIGHT ALONG WITH ME,
19 MR. SAYERS.

09:21:51 20 **BY MR. SCHERKENBACH:**

21 "IN NOMINAL LOADING CONDITIONS, THE SG5841 OPERATES

22 AT FIXED PWM FREQUENCY."

23 RIGHT?

24 **A** YEAH. YEAH, I THINK THE FIXED, JUST LIKE YESTERDAY, I
09:22:02 25 MENTIONED IS A ROUGHLY DESCRIPTION. HOWEVER, IT WAS A DETAIL.

09:22:06 1 THE CUSTOMER THEY WILL REFERENCE FOR THE SPEC ABOUT THE
2 VARIATIONS.

3 Q SO "FIXED" DOESN'T MEAN "REALLY FIXED." IN YOUR VIEW, IT
4 MEANS "ROUGHLY FIXED"?

09:22:16 5 A IT'S ROUGH. IT'S TARGET, YEAH. IT'S TARGET. BUT IT WILL
6 HAVE RANGE, VARIATION RANGES ALWAYS.

7 Q BUT IT'S CLOSE ENOUGH FOR YOU TO DESCRIBE IT IN YOUR
8 DATASHEETS AS "FIXED," RIGHT?

9 A YEAH, BECAUSE IT WILL LET CUSTOMER TO EASY UNDERSTAND OUR
09:22:32 10 TARGET. HOWEVER, EVERYTHING WE TECHNICALLY ENGINEER, WE WILL
11 REFERENCE FOR THE DETAILED SPEC.

12 Q LET'S LOOK AT THE OTHER DATASHEET YOU TALKED ABOUT ON
13 DIRECT, WHICH IS THE 6841 DATASHEET. OKAY?

14 A OKAY.

09:22:45 15 Q THIS IS DX 4681. AND THIS IS IN EVIDENCE?

16 THE COURT: OKAY. DX 4681.

17 (DOCUMENT DISPLAYED)

18 BY MR. SCHERKENBACH:

19 Q NOW, FIRST OF ALL, LET'S LOOK AT PAGE 7, HERE. THERE'S A
09:23:04 20 GRAPH, SIMILAR TO ONE WE JUST SAW.

21 (DOCUMENT DISPLAYED)

22 Q THIS SHOWS -- AND APOLOGIZE FOR THE QUALITY, BUT IT'S THE
23 BEST WE HAVE.

24 FREQUENCY VERSUS FEEDBACK VOLTAGE, AGAIN. RIGHT?

09:23:16 25 A YES.

09:23:17 1 Q AND OBVIOUSLY, THERE'S A PORTION HERE WHERE THE LINE IS
2 FLAT (INDICATING). TRUE?

3 A YES.

4 Q AND THAT, AT LEAST GRAPHICALLY, INDICATES THAT THE
09:23:31 5 FREQUENCY FOR A CERTAIN RANGE OF FEEDBACK VALUES --

6 A YES.

7 Q -- IS CONSTANT, OR FIXED, RIGHT?

8 A YEAH. IT ACTUALLY IS MEAN VALUE. AND "MEAN VALUE" MEANS
9 WE AVERAGE THE MAXIMUM, THE MINIMUM TO GET THE MEAN VALUE.

09:23:45 10 BUT ACTUALLY, WE WILL HAVE A MAXIMUM-MINIMUM RANGE.

11 WE USE "MEAN" AS AVERAGE VALUE TO CALCULATE THIS ONE, SO
12 THE RAW DATA WILL SHOW VARIATIONS. I MEAN, WE CANNOT --
13 BECAUSE WE JUST USE -- YESTERDAY, OSCILLOSCOPE, WE HAVE AREA,
14 MAXIMAL, MINIMAL AND MEAN VALUE.

09:24:11 15 "MEAN" MEANS AVERAGE. SO WE JUST PUT AVERAGE ON THIS ONE.
16 BUT IF YOU SEE A RAW DATA YOU WILL SEE THE VARIATIONS.

17 Q YOUR POINT IS IF YOU SORT OF ZOOM IN CLOSE ENOUGH, WE ARE
18 GOING TO SEE SOME WIGGLES IN THAT LINE? IS THAT WHAT YOU ARE
19 SAYING?

09:24:28 20 A YES, VARIATIONS, YES.

21 Q BUT AGAIN, FOR PURPOSES OF YOUR CUSTOMERS IN THE
22 DATASHEET -- FOR THE GRAPH, ANYWAY -- YOU SHOW IT AS FLAT?

23 A ACTUALLY, SORRY. AND THIS CONDITION IS ONE INPUT VOLTAGE
24 AND ONE TEMPERATURE. IF WE SHOW DIFFERENT INPUT, INPUT IN
09:24:46 25 VOLTAGE YOU WILL HAVE DIFFERENT, THE MEAN VALUE. IT WILL

09:24:50 1 VARY. SO BECAUSE YESTERDAY WE TALK ABOUT WE ALLOW 5 PERCENT
2 VARIATIONS THROUGH THE VDD INPUT VOLTAGE AND THE TEMPERATURE.

3 Q I'M JUST ASKING ABOUT WHAT'S SHOWN HERE (INDICATING).

4 OKAY? NOT WHAT --

09:25:05 5 A OKAY.

6 Q NOT ABOUT WHAT IT COULD LOOK LIKE. OKAY?

7 A OKAY.

8 Q ALL RIGHT. AS SHOWN IN YOUR SG6841 DATASHEET, THE
9 FREQUENCY IS SHOWN AS FIXED OR FLAT FOR A GIVEN RANGE OF

09:25:19 10 FEEDBACK VOLTAGES. RIGHT?

11 A YEAH. IT'S AVERAGE. I JUST SAY, IT'S AVERAGE, YEAH.

12 Q OKAY. NOW, SO THAT'S THE DATASHEET. THERE ALSO IS AN
13 APPLICATION NOTE FOR THE 6841. RIGHT?

14 A YES.

09:25:37 15 Q AND THIS IS PX 184.

16 MR. SCHERKENBACH: I DON'T KNOW WHETHER THAT'S BEEN
17 ADMITTED. I WOULD LIKE TO MOVE IT, IF IT HASN'T BEEN,
18 YOUR HONOR.

19 THE COURT: JUST A MINUTE, PX 184? OKAY.

09:25:53 20 MR. SCHERKENBACH: I CAN -- I'M SORRY.

21 THE COURT: HMM.

22 MR. SCHERKENBACH: I NEGLECTED TO GIVE COUNSEL A COPY
23 OF IT. I APOLOGIZE.

24 THE COURT: 184 HAS BEEN ADMITTED QUITE SOME TIME

09:26:05 25 AGO.

09:26:06 1 **MR. SCHERKENBACH:** VERY GOOD. THANK YOU.

2 (DOCUMENT DISPLAYED)

3 **BY MR. SCHERKENBACH:**

4 **Q** DO YOU RECOGNIZE THIS DOCUMENT, MR. HUANG?

09:26:12 5 **A** YEAH. THE APPLICATION NOTE, YES.

6 **Q** OKAY. AND, SO, THIS ONE, IF YOU -- IF WE LOOK AT THE
7 SECOND PAGE --

8 **A** OKAY.

9 **Q** -- THERE'S A DESCRIPTION OF THE PART. RIGHT?

09:26:27 10 (DOCUMENT DISPLAYED)

11 **Q** AND, SIMILAR TO WHAT WE SAW WITH THE 5841 APPLICATION
12 NOTE, THIS SAYS:

13 "IN NOMINAL LOADING CONDITIONS, THE SG..."

14 IT SAYS "4841." THAT SHOULD BE "6841," RIGHT? TYPO.

09:26:46 15 "... OPERATES AT FIXED PWM FREQUENCY."

16 RIGHT?

17 **A** YES, IT -- YES.

18 **Q** OKAY. NOW, AND FOR THIS PART, YOU ACTUALLY TESTIFIED IN
19 DEPOSITION THAT WHEN THE FEEDBACK VOLTAGE IS ABOVE A CERTAIN
09:27:05 20 VOLTAGE, 2.6 VOLTS, THE OSCILLATOR FREQUENCY WILL BE FIXED.
21 YOU AGREED WITH THAT. RIGHT?

22 **A** YEAH. BECAUSE EVERYTHING WE TALK ABOUT THAT, WE --
23 GENERAL PURPOSE WE TALK ABOUT THE TARGET, BUT -- YEAH.

24 **Q** ALL RIGHT. NOW, THERE'S ONE OTHER PART OF THIS DATASHEET
09:27:21 25 YOU SHOWED THE JURY THAT I WANT TO ASK YOU ABOUT. AND THAT

09:27:23 1 WAS THE SECTION ON CONSTANT OUTPUT POWER. DO YOU RECALL THAT?

2 **A** YES.

3 **Q** SORRY. NOT THE AP NOTE; THE DATASHEET. DO YOU RECALL

4 TALKING ABOUT CONSTANT OUTPUT POWER?

09:27:36 5 **A** YES.

6 **Q** SO BACK TO DX 4681, PAGE 10.

7 (DOCUMENT DISPLAYED)

8 **Q** THERE'S A SECTION HERE ON CONSTANT OUTPUT POWER LIMIT.

9 AND YOU TALKED ABOUT THIS A LITTLE BIT WITH THE JURY, RIGHT?

09:27:51 10 **A** YES.

11 **Q** IN FACT, I THINK YOU ACTUALLY HAD HIGHLIGHTED -- OR YOUR

12 COUNSEL HAD -- A REFERENCE TO THE "SENSE VOLTAGE" AT THE TOP.

13 DO YOU SEE THAT?

14 **A** YES.

09:28:01 15 **Q** THAT SENSE VOLTAGE REPRESENTS THE CURRENT THROUGH THE

16 POWER SWITCH. RIGHT?

17 **A** UH, YEAH. YES.

18 **Q** IN FACT, THE DATASHEET ACTUALLY CALLS THAT VOLTAGE A

19 "CURRENT SENSE SIGNAL." TRUE?

09:28:20 20 **A** YEAH. BECAUSE WE -- WE MONITOR THE VOLTAGE ON THE CURRENT

21 SENSE PIN. AND ON THE CURRENT, RESISTORS, WE MONITOR THE

22 VOLTAGE.

23 **Q** RIGHT.

24 **A** YEAH.

09:28:31 25 **Q** IN FACT, HOP TO THE COVER OF THIS DOCUMENT, THE FIRST

09:28:35 1 PAGE.

2 (DOCUMENT DISPLAYED)

3 Q WHAT YOU JUST DESCRIBED IS ACTUALLY SHOWN IN THIS TYPICAL

4 APPLICATION ON THE COVER. RIGHT?

09:28:42 5 A YEAH. ACTUALLY, YOU CAN THINK ABOUT, WE ALSO MONITOR THE

6 VOLTAGE OF THE INPUT POWER -- INPUT VOLTAGE OF THE Q1, THE

7 OTHER SIDE.

8 Q RIGHT. BUT FOR NOW I JUST WANT TO TALK ABOUT THE CURRENT

9 SENSE SIGNAL. OKAY?

09:28:58 10 A OKAY.

11 Q SO THE JURY UNDERSTANDS WHAT WE ARE TALKING ABOUT, Q1 IS

12 THE POWER SWITCH. RIGHT?

13 A YES.

14 Q "RS" IS A SENSE RESISTOR. RIGHT?

09:29:06 15 A YES.

16 Q WHEN YOU RUN THE CURRENT IN THE SWITCH THROUGH THAT

17 RESISTOR, YOU CREATE A VOLTAGE AT THE SENSE PIN. RIGHT?

18 A YES.

19 Q AND THAT VOLTAGE AT THE SENSE PIN REPRESENTS THE CURRENT

09:29:19 20 FLOWING THROUGH THE POWER SWITCH. RIGHT?

21 A YEAH. IT ALSO REPRESENT THE DRAIN VOLTAGE OF THE Q1, THE

22 MOSFET. IT IS A SENSE, YEAH.

23 Q SO THAT IS WHY --

24 MR. SCHERKENBACH: NOW, GO TO PAGE 9 OF THE

09:29:35 25 DATASHEET.

09:29:36 1 (DOCUMENT DISPLAYED)

2 **BY MR. SCHERKENBACH:**

3 **Q** -- THE VOLTAGE ON THAT SENSE PIN IS ACTUALLY CALLED --

4 **MR. SCHERKENBACH:** THE UPPER RIGHT, MR. SAYERS?

09:29:43 5 (DOCUMENT DISPLAYED)

6 **BY MR. SCHERKENBACH:**

7 **Q** -- IS ACTUALLY CALLED A "CURRENT SENSE SIGNAL." DO YOU
8 SEE WHERE I'M POINTING?

9 **A** YES.

09:29:49 10 **MR. SCHERKENBACH:** OKAY. "CURRENT" RIGHT THERE IN
11 THE MIDDLE, MR. SAYERS: "CURRENT SENSE SIGNAL."

12 (DOCUMENT HIGHLIGHTED)

13 **BY MR. SCHERKENBACH:**

14 **Q** ALL RIGHT. NOW, IN FACT, IF WE LOOK AT THE TABLE --
09:30:01 15 THERE'S LOTS OF TABLES IN THESE DATASHEETS. RIGHT?

16 **A** YES.

17 **Q** AND ONE OF THE TABLES ACTUALLY TELLS YOU WHAT THE PINS ARE
18 FOR. RIGHT? PIN DESCRIPTION TABLE. FAMILIAR WITH THAT?

19 **A** YEAH.

09:30:12 20 **Q** I'LL SHOW IT TO YOU. IT IS ON PAGE 2.

21 **A** OKAY.

22 **Q** PAGE 2 OF THE DATASHEET.

23 (DOCUMENT DISPLAYED)

24 **MR. SCHERKENBACH:** AND LET'S HIGHLIGHT LINE 6.

25

09:30:22 1 **BY MR. SCHERKENBACH:**

2 **Q** SO PIN 6 IS THE SENSE PIN. RIGHT?

3 **A** YES.

4 **Q** AND ITS FUNCTION IS:

09:30:30 5 "CURRENT SENSE."

6 CORRECT?

7 **A** YEAH, IT'S A NAME, ACTUALLY "SENSE VOLTAGE." IT'S A NAME.

8 **Q** IT SAYS -- THE DESCRIPTION SAYS:

9 "CURRENT SENSE. THE SENSED VOLTAGE IS USED FOR

09:30:43 10 CURRENT MODE CONTROL AND PULSE-BY-PULSE CURRENT

11 LIMITING."

12 RIGHT?

13 **A** YES.

14 **Q** SO, THE VOLTAGE, THE SENSED VOLTAGE IS USED FOR CURRENT

09:30:59 15 LIMITING. TRUE?

16 **A** YEAH. FOR CURRENT LIMIT. BUT, AS I TOLD, THAT WE SENSE

17 THE VOLTAGE, YES.

18 **Q** AND IT'S JUST MORE GENERALLY, MR. HUANG --

19 **A** OKAY.

09:31:09 20 **Q** IT'S VERY, VERY COMMON FOR ELECTRICAL ENGINEERS TO USE A

21 VOLTAGE TO REPRESENT THE VALUE OF A CURRENT. RIGHT?

22 **A** YES.

23 **Q** AND, IN FACT, THE OPPOSITE IS ALSO TRUE. IT'S COMMON TO

24 USE A CURRENT TO REPRESENT THE VALUE OF A VOLTAGE. RIGHT?

09:31:29 25 **A** I THINK FROM OUR DESIGNER POINT OF VIEW IT IS MORE EASY TO

09:31:34 1 USE VOLTAGE TO MONITOR, NO MATTER CURRENT OR VOLTAGE. BUT
2 IT'S MORE HARD TO USE CURRENT TO MONITOR VOLTAGE. IT'S FROM A
3 DESIGN POINT OF VIEW. IT IS EASIER FOR OUR DESIGNER. SO WE
4 PREFER TO USE VOLTAGE.

09:31:52 5 **Q** FAIR ENOUGH. AND, IN FACT, BECAUSE IT IS EASIER, THAT'S
6 WHY IT IS A LOT MORE COMMON TO ACTUALLY USE A VOLTAGE TO
7 REPRESENT A CURRENT. RIGHT?

8 **A** YES. YEAH.

9 **Q** ALL RIGHT.

09:32:03 10 **MR. SCHERKENBACH:** I DON'T HAVE ANY OTHER QUESTIONS,
11 YOUR HONOR.

12 **THE COURT:** ALL RIGHT. THANK YOU.

13 THEN, ANY FURTHER DIRECT? REDIRECT.

14 **MR. JACOBS:** THANK YOU, YOUR HONOR.

09:32:32 15 **THE COURT:** READY?

16 **REDIRECT EXAMINATION**

17 **BY MR. JACOBS:**

18 **Q** GOOD MORNING, MR. HUANG.

19 **A** GOOD MORNING.

09:32:36 20 **Q** MR. SCHERKENBACH, GOING BACK TO YESTERDAY, FIRST ASKED YOU
21 ABOUT THE JULY 25TH EMAIL THAT REQUESTED YOU TO PERFORM SOME
22 TESTING. DO YOU RECALL THAT?

23 **A** YES.

24 **Q** AND, HE POINTED OUT THAT DR. WEI WAS NOT IDENTIFIED IN
09:32:52 25 THAT ORIGINAL EMAIL. DO YOU REMEMBER THAT?

09:32:55 1 **A** YES.

2 **Q** NOW, YOU EVENTUALLY PROVIDED RAW DATA ON SCREENSHOTS TO
3 DR. WEI. RIGHT?

4 **A** YES.

09:33:02 5 **Q** AND THE RAW DATA THAT YOU PROVIDED TO DR. WEI, WAS THAT
6 CHANGED IN ANY WAY BY HOW YOU FIRST LEARNED ABOUT THE TESTING
7 YOU PERFORMED HERE?

8 **MR. SCHERKENBACH:** OBJECTION, YOUR HONOR, LEADING.

9 **THE COURT:** OVERRULED.

09:33:14 10 **MR. JACOBS:** YEAH. IT'S "YES" OR "NO."

11 **THE WITNESS:** SORRY. CAN YOU JUST REPEAT IT?

12 **BY MR. JACOBS:**

13 **Q** SURE. THE RAW DATA THAT YOU PROVIDED, WAS THAT CHANGED IN
14 ANY WAY BY HOW YOU FIRST LEARNED ABOUT THE TESTING THAT YOU
09:33:26 15 PERFORMED?

16 **A** YEAH. THE CONDITION NOT CHANGE. JUST RECAPTURE
17 SCREENSHOT.

18 **Q** OKAY. NOW, MR. SCHERKENBACH WENT ON TO QUESTION YOU ABOUT
19 THE FACT THAT DR. WEI, YOU DIDN'T MEET HIM UNTIL AUGUST 20TH.
09:33:40 20 RIGHT?

21 **A** YES.

22 **Q** DID THE FACT THAT YOU DID NOT KNOW DR. WEI UNTIL
23 AUGUST 20TH CHANGE THE RAW TEST DATA THAT YOU PROVIDED TO
24 DR. WEI IN ANY WAY?

09:33:52 25 **A** YEAH. BEFORE THAT DAY, I DIDN'T KNOW DR. WEI. YES.

09:33:56 1 **Q** THE TEST DATA THAT YOU PROVIDED TO DR. WEI, WAS IT CHANGED
2 IN ANY WAY BY WHEN YOU CAME TO KNOW HIM?

3 **A** SORRY. CAN YOU SAY AGAIN THIS QUESTION?

4 **Q** YES. YOU PROVIDED TEST DATA TO DR. WEI. RIGHT?

09:34:10 5 **A** YES.

6 **Q** WERE THE VALUES CHANGED IN ANY WAY BY THE DATE THAT YOU
7 CAME TO KNOW DR. WEI?

8 **A** BY THE DAY I CAME TO KNOW DR. WEI?

9 **THE COURT:** DID YOU MEET DR. WEI?

09:34:23 10 **MR. JACOBS:** HE TALKED TO HIM ON THE TELEPHONE,
11 YOUR HONOR.

12 **THE COURT:** ALL RIGHT. WHY DON'T YOU USE "TALKED ON
13 THE PHONE"? IT MAY BE EASIER.

14 **BY MR. JACOBS:**

09:34:29 15 **Q** OKAY. YOU TALKED TO DR. WEI ON THE TELEPHONE AT SOME
16 POINT IN TIME. RIGHT?

17 **A** YES, YES.

18 **Q** AND YOU PROVIDED DR. WEI RAW TEST DATA FROM SCREENSHOTS.
19 IS THAT RIGHT?

09:34:36 20 **A** YES.

21 **Q** DID THAT TEST DATA GET ALTERED OR CHANGED IN ANY WAY FROM
22 WHEN IT CAME TO THE SCREENSHOT AND WAS PROVIDED TO DR. WEI?

23 **A** SORRY, I -- I'M NOT SO UNDERSTAND THIS SENTENCE MEANS.

24 **Q** DID YOU JUST PROVIDE DR. WEI THE TEST DATA THAT WAS ON THE
09:34:57 25 SCREENSHOTS FROM THE TESTS THAT YOU PERFORMED?

09:35:00 1 **A** YES. JUST --

2 **Q** YOU DIDN'T CHANGE THAT DATA IN ANY WAY, DID YOU?

3 **A** I JUST CHANGE THE SCREENSHOT. BUT THE TESTING, TEST
4 CONDITION IS ALL THE SAME.

09:35:08 5 **Q** WHAT ABOUT THE RAW DATA? DID YOU CHANGE THE RAW DATA?

6 **A** "RAW DATA," YOU MEAN --

7 **Q** THE NUMBERS.

8 **A** "NUMBERS." YOU MEAN -- BUT WE ONLY TAKE SCREENSHOT,
9 RIGHT?

09:35:20 10 **Q** YES.

11 **A** YES. WE ONLY -- YES.

12 **Q** AND THERE ARE SOME VALUES ON THE SCREENSHOTS?

13 **A** YEAH, I HAD SOME VALUE, YES. I JUST NOTICED THE VALUE
14 NUMBER. YES.

09:35:31 15 **Q** OKAY. NOW, MR. SCHERKENBACH ASKED YOU ABOUT YOUR
16 SUGGESTIONS TO PERFORM SURGE TESTS AND ESD TESTS. DO YOU
17 REMEMBER?

18 **A** YES.

19 **Q** WHY DID YOU SUGGEST PERFORMING SURGE TESTS AND ESD TESTS?

09:35:42 20 **A** YEAH, BECAUSE I KNOW THAT CYCLE SKIPPING WILL BE THE
21 ISSUE. AND I THINK THIS KIND OF TEST CAN REPRESENT THE CYCLE
22 SKIPPING.

23 **Q** DO THE SURGE TEST AND ESD TEST ASSESS THE PERFORMANCE OF
24 FREQUENCY VARIATION IN ANY WAY?

09:36:00 25 **A** THE SURGE -- THE SURGE AND CYCLE SKIPPING, WE -- I THINK

09:36:06 1 FOR SURGE, YES. ESD PROTECTION WE ONLY PERFORM THE CYCLE
2 SKIPPING, YEAH.

3 Q YOU WERE ASKED ABOUT DYNAMIC LOAD TESTS BY
4 MR. SCHERKENBACH. RIGHT?

09:36:17 5 A YES.

6 Q AND THE DYNAMIC LOAD TESTS, THEY TEST FOR CYCLE SKIPPING,
7 AS WELL. IS THAT RIGHT?

8 A YES.

9 Q MR. SCHERKENBACH ASKED YOU ABOUT SWAPPING OUT CERTAIN
09:36:28 10 SCREENSHOTS. DO YOU RECALL THAT?

11 A YES.

12 Q CAN YOU EXPLAIN ONE MORE TIME WHY YOU SWAPPED OUT CERTAIN
13 SCREENSHOTS?

14 A YEAH. BECAUSE JUST I -- I TAKE PHOTOS, AND I THINK THAT
09:36:40 15 PHOTO MAYBE IS NOT -- DID TRULY REPRESENT THE TEST RESULT. SO
16 I JUST ADJUST THE SETTING, LIKE USE FLASH LIGHT, USE
17 ACCUMULATOR MODE, YEAH, TO PRESENT THE TRUE RESULT. BUT NO
18 CHANGE FOR THE SETTINGS, YEAH.

19 Q SO WHAT WAS PROVIDED TO DR. WEI, THERE WERE NO CHANGES IN
09:37:00 20 THE SETTINGS. RIGHT?

21 A YES. NO SETTING. NO SETTING CHANGE, JUST CAPTURE, YES.

22 Q SO WHEN DR. WEI FORMED HIS OPINIONS, HE HAD THE DATA THAT
23 WAS COLLECTED BY THE OSCILLOSCOPE BASED ON THE SETTINGS THAT
24 YOU PROVIDED. RIGHT?

09:37:13 25 A YES.

09:37:14 1 **Q** OKAY. NOW, MR. SCHERKENBACH ASKED YOU A NUMBER OF
2 QUESTIONS ABOUT THE DECLARATION THAT YOU PROVIDED. DO YOU
3 RECALL THAT?

4 **A** YES.

09:37:22 5 **Q** I'M SURE THIS WAS NOT THE FIRST MISTAKE YOU HAVE EVER MADE
6 IN YOUR LIFE. IS THAT CORRECT?

7 **A** YES.

8 **Q** AND WHEN YOU LEARNED OF THIS MISTAKE, DID YOU BRING IT TO
9 POWER INTEGRATIONS' ATTORNEYS' ATTENTION DURING YOUR
09:37:34 10 DEPOSITION?

11 **A** YES.

12 **Q** HOW DID YOU DO SO?

13 **A** I SAY THAT I WAS TOO FOCUSED ON THE TEST RESULT. WHEN I
14 SIGNED THIS DECLARATION, I ONLY FOLLOW THE REPORT'S DATE TO
09:37:45 15 SIGN IT. AND I DIDN'T RECALL THE REPORT DATE SHOULD BE
16 MODIFIED, SHOULD BE UPDATED TO THE DATE THAT I PERSONALLY
17 WITNESSED IT.

18 **Q** THANK YOU.

19 **A** SO, I'M SORRY, YEAH.

09:37:54 20 **Q** YOU WERE ASKED SOME QUESTIONS ABOUT TEST 3. DO YOU RECALL
21 THAT?

22 **A** YES.

23 **Q** MR. SCHERKENBACH DIDN'T SHOW YOU WHAT TEST 3 WAS ABOUT
24 DURING YOUR QUESTIONING, DID HE?

09:38:04 25 **A** NO.

09:38:05 1 Q CAN YOU EXPLAIN WHAT TEST 3 WAS?

2 A AS I RECALL, THE TEST 3 WAS ABOUT MINIMUM "ON" TIME.

3 Q IT WAS ABOUT "ON" TIME VALUES?

4 A YEAH. "ON" TIME VALUES, YES.

09:38:18 5 Q IT WAS NOT ABOUT FREQUENCY VARIATION?

6 A NO.

7 MR. JACOBS: LET'S LOOK, IF WE COULD, AT DX 4608,

8 PLEASE.

9 BY MR. JACOBS:

09:38:34 10 Q YOU WERE ASKED SOME QUESTIONS, MR. HUANG, ABOUT THE

11 SG5841J PRODUCT. CORRECT?

12 A YES.

13 Q OKAY.

14 THE CLERK: I DON'T THINK THIS IS ADMITTED.

09:38:53 15 THE COURT: DX 4608 IS NOT IN YET.

16 MR. JACOBS: LET ME GET THE RIGHT NUMBER, YOUR HONOR.

17 THE COURT: OKAY. IT IS A SCHEMATIC OF SOME SORT FOR

18 J.

19 MR. JACOBS: UH-HUH.

09:39:03 20 MR. SCHERKENBACH: I THINK IT IS 4606.

21 MR. JACOBS: THANK YOU, COUNSEL.

22 BY MR. JACOBS:

23 Q 4606.

24 THE COURT: THAT'S IN EVIDENCE.

09:39:12 25 (DOCUMENT DISPLAYED)

09:39:20 1 **MR. JACOBS:** AND CAN YOU PULL UP PAGE 6, PLEASE?

2 (DOCUMENT DISPLAYED)

3 **MR. JACOBS:** AND BLOW UP THE OSCILLATOR SECTION,
4 PLEASE.

09:39:32 5 (DOCUMENT DISPLAYED)

6 **BY MR. JACOBS:**

7 **Q** NOW, YOU WERE ASKED SOME QUESTIONS ABOUT CHOOSING A TARGET
8 FREQUENCY. DO YOU RECALL THAT?

9 **A** YES.

09:39:37 10 **Q** NOW, ONCE THE TARGET FREQUENCY IS SET, WHAT DOES THE
11 OSCILLATOR SECTION OF THE DATASHEET, PARTICULARLY THE LAST TWO
12 LINES, TELL US ABOUT FREQUENCY VARIATION?

13 **A** IT MEANS WHEN YOU SET THE TARGET, THE IC WILL STILL
14 PERFORM THE 5 PERCENT VARIATION, NO MATTER THE VDD INPUT
09:40:00 15 VOLTAGE OR WITHIN TEMPERATURE.

16 **Q** SO, THE FREQUENCY VARIANCE WILL EXIST ABOVE AND BELOW THE
17 TARGET FREQUENCY?

18 **A** YES. IT'S VARIED.

19 **Q** YOU WERE SHOWN AN APPLICATION NOTE FROM THE SG5841J
09:40:17 20 PRODUCT, AS WELL. DO YOU RECALL THAT?

21 **A** YES.

22 **Q** AND MR. SCHERKENBACH POINTED OUT THAT THE WORD "FIXED" WAS
23 USED IN THAT APPLICATION NOTE?

24 **A** YES.

09:40:26 25 **Q** IS THAT THE TARGET FREQUENCY THAT YOU HAVE BEEN TALKING

09:40:28 1 ABOUT?

2 **A** YES. THE TARGET FREQUENCY.

3 **Q** AND WHAT DOES THE DATASHEET FREQUENCY VARIATION VERSUS

4 DEVIATION TELL US ABOUT THAT?

09:40:38 5 **A** IT TELLS ABOUT THAT ON THIS TARGET WE WILL HAVE 5 PERCENT

6 VARIATION THROUGH THE VDD INPUT VOLTAGE AND THE TEMPERATURE.

7 **Q** AND YOU WERE ASKED SOME QUESTIONS ABOUT THE SG6841, AS

8 WELL. DO YOU RECALL?

9 **A** YES.

09:40:54 10 **Q** AND MR. SCHERKENBACH ASKED YOU ABOUT USING THE WORD

11 "FIXED" IN YOUR DEPOSITION?

12 **A** YES.

13 **Q** DO YOU RECALL IN YOUR DEPOSITION ALSO TALKING ABOUT SOME

14 OTHER FACTORS THAT WOULD AFFECT THE VARIATION OF THE

09:41:07 15 FREQUENCY?

16 **A** YES.

17 **Q** WHAT DID YOU TALK ABOUT IN YOUR DEPOSITION?

18 **A** YEAH, DEPOSITION, I SAY THAT EVEN THOUGH WE SAY "FIXED,"

19 IT IS NOT REALLY FIXED, ACTUALLY. IT WILL VARY WITH THE

09:41:19 20 TEMPERATURE AND ABOUT THE SWITCH IN SPIKE NOISE AND THE INPUT

21 VOLTAGE. YEAH.

22 **Q** JUST FINAL FEW QUESTIONS. YOU WERE ASKED A LITTLE BIT

23 ABOUT THE VOLTAGE AND THE SENSE RESISTOR. DO YOU RECALL?

24 **A** YES.

09:41:32 25 **Q** NOW, IN DESIGNING THE FAIRCHILD PRODUCTS, YOU CHOSE TO

09:41:38 1 SENSE VOLTAGE RATHER THAN CURRENT. IS THAT RIGHT?

2 **A** YEAH.

3 **MR. SCHERKENBACH:** YOUR HONOR, LEADING, AND IT'S BEEN
4 LEADING THE WHOLE TIME.

09:41:45 5 **THE COURT:** WELL, THERE'S BEEN QUITE A BIT OF
6 LEADING.

7 **MR. JACOBS:** I CAN REPHRASE, YOUR HONOR.

8 **THE COURT:** ALL RIGHT. I DON'T THINK IT'S IN
9 DISPUTE, BUT I'LL SUSTAIN.

09:41:51 10 **MR. JACOBS:** I THOUGHT IT WAS FOUNDATIONAL BECAUSE OF
11 LANGUAGE ISSUES, BUT I'M HAPPY TO REPHRASE.

12 **THE COURT:** WELL, THERE MAY BE SOME DIFFICULTY, BUT
13 OKAY. I'LL SUSTAIN.

14 **MR. JACOBS:** OKAY.

09:42:00 15 **BY MR. JACOBS:**

16 **Q** NOW, WHY DID YOU CHOOSE TO SENSE VOLTAGE RATHER THAN
17 CURRENT IN THE FAIRCHILD PRODUCTS?

18 **A** YEAH. FROM THE DESIGN POINT OF VIEW, TO SENSE VOLTAGE IS
19 MORE EASY TO DESIGN AND THE -- AND I THINK THE -- THE ACCURACY
09:42:17 20 IS MORE PRECISE TO SENSE THE VOLTAGE.

21 **Q** WHEN YOU SAY "THE ACCURACY IS MORE PRECISE," CAN YOU
22 EXPLAIN THAT, PLEASE?

23 **A** YEAH. WHEN YOU SENSE VOLTAGE, I THINK YOU CAN HAVE A -- A
24 BETTER RESOLUTIONS, IS FROM THE CIRCUIT POINT OF VIEW YOU CAN
09:42:33 25 HAVE A BETTER RESOLUTION SO YOU CAN CONTROL THE RESULT, YEAH,

09:42:38 1 BETTER.

2 Q DOES THAT PROVIDE A FEATURE BENEFIT TO THE FAIRCHILD
3 PRODUCTS?

4 A YES.

09:42:42 5 Q OKAY.

6 MR. JACOBS: THANK YOU. I HAVE NO FURTHER QUESTIONS,
7 SIR.

8 THE COURT: ALL RIGHT. ANY RECROSS?

9 MR. SCHERKENBACH: I DO, YOUR HONOR.

09:42:48 10 RECROSS EXAMINATION

11 BY MR. SCHERKENBACH:

12 Q MR. HUANG, ON THIS LAST POINT ABOUT USING A VOLTAGE SIGNAL
13 TO REPRESENT THE CURRENT THROUGH THE SWITCH, YOU'VE DESCRIBED
14 WHY THAT'S A BETTER WAY TO DO IT? IS THAT WHAT YOU'VE JUST
09:42:58 15 SAID?

16 A YEAH. YES.

17 Q YEAH. HAVE YOU SEEN THE POWER INTEGRATIONS '908 PATENT IN
18 THIS CASE?

19 A '908 -- ACTUALLY, I DON'T FULLY UNDERSTAND -- I DON'T --
09:43:07 20 YEAH, I DON'T -- I DON'T STUDY POWER INTEGRATIONS' PATENTS.

21 Q OKAY. SO YOU DON'T KNOW WHETHER THE POWER INTEGRATIONS'
22 PATENT DESCRIBES JUST EXACTLY THAT SAME IMPLEMENTATION, DO
23 YOU?

24 MR. JACOBS: YOUR HONOR, LACKS FOUNDATION. HE
09:43:18 25 INDICATED HE'S NEVER SEEN THE PATENT.

09:43:21 1 **THE WITNESS:** YEAH.

2 **THE COURT:** SUSTAINED.

3 **THE WITNESS:** YES.

4 **BY MR. SCHERKENBACH:**

09:43:23 5 **Q** ALL RIGHT. IT WAS SUSTAINED.

6 **A** I'M NOT VERY -- I'M NOT VERY FAMILIAR WITH THE PATENTS.

7 **Q** OKAY. JUST A COUPLE OF OTHER THINGS.

8 I BELIEVE YOU SAID ON REDIRECT THAT YOU DIDN'T MEET

9 DR. WEI UNTIL AUGUST 20TH. YOU DIDN'T MEET HIM ON

09:43:39 10 AUGUST 20TH. RIGHT?

11 **A** YEAH. I HAVE A CONFERENCE CALL WITH --

12 **Q** TELEPHONE CALL.

13 **A** TELEPHONE CALL, YES.

14 **Q** WHEN'S THE FIRST TIME YOU EVER MET DR. WEI?

09:43:49 15 **A** MY FIRST TIME --

16 **THE COURT:** IN PERSON?

17 **MR. SCHERKENBACH:** IN PERSON.

18 **THE WITNESS:** IN PERSON, I THINK IT'S 2013. AND

19 PROBABLY BE NOVEMBER OR DECEMBER, I THINK. YEAH.

09:44:05 20 **BY MR. SCHERKENBACH:**

21 **Q** OKAY. LONG AFTER AUGUST, RIGHT?

22 **A** YES.

23 **Q** AND LONG AFTER DR. WEI HAD FILED HIS REPORT IN THIS CASE

24 ON AUGUST 22ND?

09:44:16 25 **A** YES.

09:44:18 1 Q YOU ALSO SAID, I THINK, THAT YOU PROVIDED DR. WEI DATA.
2 YOU SENT ALL OF YOUR DATA AND REPORTS TO THE LAWYERS. RIGHT?
3 A YES.
4 Q AND THEY, IN SOME WAY, FORWARDED INFORMATION TO DR. WEI.
09:44:33 5 RIGHT?
6 A YES.
7 Q YOU NEVER SENT ANYTHING DIRECTLY TO DR. WEI. RIGHT?
8 A UH, AS I RECALL, I DON'T SEND -- I DON'T SEND REPORT TO
9 DR. WEI DIRECTLY. I DON'T.
09:44:46 10 Q OKAY. LAST POINT. YOUR COUNSEL ASKED YOU ABOUT BRINGING
11 THE ERROR IN YOUR DECLARATION TO OUR ATTENTION. DO YOU RECALL
12 THAT?
13 A CAN YOU SAY AGAIN? SORRY.
14 Q YOUR COUNSEL ASKED YOU ABOUT WHETHER YOU HAD BROUGHT --
09:45:04 15 YOU HAD AFFIRMATIVELY BROUGHT TO OUR ATTENTION THE ERROR IN
16 YOUR DECLARATION. DO YOU RECALL THAT TESTIMONY?
17 A I'M NOT SO SURE I UNDERSTAND WHAT THIS SENTENCE MEANS.
18 Q OKAY. I'LL REPHRASE IT. OKAY? YOUR DECLARATION THAT WE
19 TALKED ABOUT IS DATED OCTOBER 9TH, 2013.
09:45:27 20 A YES.
21 Q OKAY?
22 A YES.
23 Q YOUR DEPOSITION IN THIS CASE --
24 A YES.
09:45:31 25 Q -- WAS JANUARY 13TH, 2014.

09:45:35 1 **A** YES.

2 **Q** SO, IT WAS THREE MONTHS LATER --

3 **A** YES.

4 **Q** -- THAT THE DEPOSITION HAPPENED WHERE YOU FIRST SAID

09:45:42 5 ANYTHING ABOUT AN ERROR IN YOUR DECLARATION.

6 **A** YES. THREE MONTHS LATER. YES. ALMOST.

7 **MR. SCHERKENBACH:** NO FURTHER QUESTIONS.

8 **THE COURT:** ANYTHING FURTHER OF MR. HUANG?

9 **MR. JACOBS:** NOT AT ALL, YOUR HONOR. THANK YOU.

09:45:54 10 **THE COURT:** THANK YOU.

11 MR. HUANG, THANK YOU. YOU ARE EXCUSED AT THIS TIME.

12 **THE WITNESS:** THANK YOU.

13 (WITNESS EXCUSED)

14 **THE COURT:** OKAY. THAT CONCLUDES THE TESTIMONY OF

09:46:08 15 MR. HUANG.

16 WHO WOULD BE THE NEXT WITNESS, MR. JACOBS?

17 **MR. JACOBS:** THE EXPERT WITNESS ON TECHNICAL ISSUES,

18 DR. WEI.

19 **THE COURT:** ALL RIGHT. DR. WEI, THEN, IF YOU WILL

09:46:19 20 COME FORWARD, PLEASE.

21 **GU-YEON WEI, PH.D., DEFENDANTS' WITNESS, SWORN**

22 **THE CLERK:** PLEASE BE SEATED.

23 **THE WITNESS:** THANK YOU.

24 **THE CLERK:** PLEASE STATE YOUR FULL NAME FOR THE

09:46:56 25 RECORD, AND SPELL YOUR LAST NAME, PLEASE.

09:46:59 1 **THE WITNESS:** MY NAME IS GU-YEON WEI. THAT'S G-U
2 HYPHEN Y-E-O-N. LAST NAME IS W-E-I.

3 **THE COURT:** OKAY. READY?

4 **MS. ONDRICK:** MAY I APPROACH, YOUR HONOR?

09:47:14 5 **THE COURT:** YOU MAY.

6 **DIRECT EXAMINATION**

7 **BY MS. ONDRICK:**

8 **Q** GOOD MORNING, DR. WEI.

9 **A** GOOD MORNING.

09:47:35 10 **Q** WOULD YOU PLEASE INTRODUCE YOURSELF TO JUDGE CHESNEY AND
11 THE JURY?

12 **A** SURE. GOOD MORNING, YOUR HONOR.

13 **THE COURT:** GOOD MORNING.

14 **THE WITNESS:** GOOD MORNING, LADIES AND GENTLEMEN. MY
09:47:42 15 NAME IS GU-YEON WEI. I AM A PROFESSOR OF ELECTRICAL
16 ENGINEERING AND COMPUTER SCIENCE AT HARVARD UNIVERSITY.

17 **BY MS. ONDRICK:**

18 **Q** LET'S START WITH YOUR EDUCATIONAL BACKGROUND, IF WE COULD.
19 WHERE DID YOU GO TO SCHOOL?

09:47:56 20 **A** SO I WENT TO STANFORD FOR MY UNDERGRADUATE DEGREE,
21 MASTER'S AND PH.D.

22 **Q** AND WHAT DID YOU DO AFTER GRADUATION?

23 **A** WELL, AFTER GRADUATION I FIRST WORKED AT A STARTUP IN
24 OREGON CALLED ACCELERANT NETWORKS. AND I WORKED THERE FOR
09:48:11 25 ABOUT A YEAR-AND-A-HALF. I WANTED TO GET SOME INDUSTRY

09:48:15 1 EXPERIENCE. AND THEN, I WENT TO HARVARD UNIVERSITY TO TEACH.

2 Q WHAT YEAR DID YOU GO TO HARVARD?

3 A I STARTED AT HARVARD IN JANUARY, 2002.

4 Q AND YOU HAVE BEEN THERE EVER SINCE, I TAKE IT?

09:48:25 5 A YEAH, I HAVE BEEN THERE.

6 Q CAN YOU TELL US ABOUT THE RESEARCH THAT YOU CONDUCT AT
7 HARVARD?

8 A I DO RESEARCH IN A VARIETY OF AREAS THAT IS RELATED TO
9 INTEGRATED CIRCUITS, COMPUTERS. SO MY RESEARCH SPANS

09:48:36 10 EVERYTHING FROM HOW TO BUILD ENERGY-EFFICIENT COMPUTER CHIPS
11 OR MICROPROCESSORS. AND IN ORDER TO DO SO, MY STUDENTS WORK
12 ON PRODUCTS THAT ARE RELATED TO POWER SUPPLIES.

13 IN ADDITION TO THAT I ALSO WORK ON SOME OTHER INTERESTING
14 PROJECTS THAT RELATE TO MICRO-MECHANICAL SYSTEMS. AND I DON'T
09:48:57 15 KNOW IF YOU MAY HAVE HEARD OF THIS OR NOT, BUT ONE OF THE
16 PROJECTS THAT WE WORK ON IS SOMETHING CALLED "THE HARVARD
17 ROBOBEES." "ROBO," AS IN "ROBOT."

18 AND SO, WHAT WE TRY TO DO THERE IS WE ARE BUILDING THESE
19 VERY SMALL ROBOTS THAT FLAP THEIR WINGS AND FLY AROUND. AND
09:49:18 20 IN ORDER TO GET THOSE WINGS TO FLOP AROUND YOU HAVE TO TAKE A
21 POWER OR ENERGY FROM A 3.7-VOLT BATTERY, LIKE YOU MIGHT FIND
22 IN YOUR CELL PHONE, BUT REALLY, REALLY SMALL.

23 (REPORTER INTERRUPTION)

24 THE WITNESS: SURE. AND THEN, WE HAVE TO BOOST IT UP
09:49:29 25 INTO A 200-VOLT VALUE SO THAT WE CAN ACTUALLY DRIVE THE WINGS

09:49:34 1 AND HAVE THEM FLAP (INDICATING).

2 AND SO, THOSE ARE POWER CONVERTER CIRCUITRY THAT WE INSERT
3 INTO A VERY SMALL ROBOT.

4 **BY MS. ONDRICK:**

09:49:44 5 **Q** WHAT TYPES OF COURSES DO YOU TEACH AT HARVARD?

6 **A** I TEACH PRIMARILY IN THE AREA OF CIRCUIT DESIGN,
7 INTEGRATED CIRCUIT DESIGN, AND COVER A VARIETY OF TOPICS THAT
8 RELATE TO HOW TO DESIGN CIRCUITS. A LITTLE BIT IN TERMS OF
9 COMPUTER ARCHITECTURE. AND THERE'S ANALOG CIRCUITS, DIGITAL
09:50:01 10 CIRCUITS AND SOME POWER CONVERTER CIRCUITS, AS WELL.

11 **Q** AND YOU HAVE ALSO SERVED A PRETTY PRESTIGIOUS ROLE AT
12 HARVARD, TOO, HAVEN'T YOU?

13 **A** SO I THINK IT WAS ABOUT THREE YEARS AGO. I HAD COME BACK
14 FROM SABBATICAL AFTER I HAD GOTTEN TENURE. AND MY DEAN ASKED
09:50:18 15 ME TO SERVE IN AN ADMINISTRATIVE ROLE TO BE THE ACADEMIC -- OR
16 THE DEAN FOR ACADEMIC PROGRAMS.

17 AND SO THAT WAS A LOT OF ADMINISTRATIVE WORK THAT I DID
18 FOR ABOUT A YEAR-AND-A-HALF.

19 **Q** BUT THAT WAS FOR THE ENTIRE UNIVERSITY -- OR FOR THE
09:50:30 20 ENTIRE ENGINEERING DEPARTMENT AT HARVARD, CORRECT?

21 **A** THAT WAS FOR THE SCHOOL OF ENGINEERING.

22 **Q** OKAY. NOW, HAVE YOU BEEN RETAINED TO PROVIDE TESTIMONY ON
23 BEHALF OF FAIRCHILD IN THIS CASE?

24 **A** YES, I HAVE.

09:50:42 25 **Q** SO LET'S JUST GO AHEAD AND GIVE THE JURY A LITTLE ROAD MAP

09:50:45 1 OF THE TESTIMONY THAT YOU ARE GOING TO BE PROVIDING TODAY.

2 OKAY?

3 **A** SURE. OH, SURE. SO, FIRST, WHAT WE ARE GOING TO DO IS DO
4 A LITTLE TUTORIAL.

09:50:56 5 WE HAVE BEEN HEARING ABOUT A LOT OF DIFFERENT
6 TECHNOLOGIES. I CAN UNDERSTAND THAT IT MIGHT BE PRETTY
7 COMPLICATED. AND SO USUALLY WHAT I LIKE TO DO IS TAKE A STEP
8 BACK, KIND OF PRESENT SOME OF THE CONCEPTS THAT RELATE TO THE
9 TECHNOLOGY. SO WE WILL START WITH THE TUTORIAL.

09:51:10 10 AND THEN, WHAT WE WILL DO IS MOVE ON TO MY OPINIONS IN
11 REGARDS TO THE PATENTS THAT ARE AT ISSUE, THE '908 AND THE
12 '079 PATENT.

13 AND WE WILL BE LOOKING AT THE TECHNOLOGIES FOR THE ACCUSED
14 PRODUCTS FROM FAIRCHILD. AND I WILL ESSENTIALLY STEP THROUGH
09:51:27 15 AND EXPLAIN WHY I BELIEVE MY OPINION IS THAT THE FAIRCHILD
16 PRODUCTS DO NOT INFRINGE THOSE TWO PATENTS.

17 AND THEN, WE ARE GOING TO SHIFT GEARS, AND WE ARE GOING TO
18 TALK ABOUT SOMETHING CALLED "INVALIDITY." AND, THROUGH -- BY
19 STEPPING THROUGH EACH OF THE CLAIMS AND EACH OF THE ELEMENTS
09:51:44 20 IN THE CLAIM, WHAT I'LL SHOW YOU IS HOW THERE'S PRIOR ART.

21 THERE IS INFORMATION PROVIDED OR AVAILABLE TO THE PUBLIC
22 PRIOR TO WHEN THESE PATENTS CAME ABOUT, AND HOW ALL THE
23 INVENTIONS THAT ARE DISCLOSED IN THE PATENTS OR IN THE CLAIMS
24 WERE ALREADY AVAILABLE IN THE PUBLIC.

09:52:05 25 **Q** AND HAVE YOU PREPARED SOME MATERIALS TO HELP US WITH ALL

09:52:07 1 THAT TODAY?

2 **A** I HAVE.

3 **Q** OKAY. WHY DON'T WE GO AHEAD AND GET STARTED.

4 (DOCUMENT DISPLAYED)

09:52:16 5 **Q** SO DR. WEI, WHAT IS CURRENT?

6 **A** RIGHT. SO, WHAT I THOUGHT WOULD BE NICE IS TO TAKE A STEP

7 BACK. WE HAVE BEEN HEARING A LOT ABOUT CURRENTS, A LOT ABOUT

8 VOLTAGES. AND SO WHEN I AM PRESENTING SOME OF THESE CONCEPTS

9 I LIKE TO USE ANALOGIES. OKAY?

09:52:32 10 SO CURRENT IS ESSENTIALLY A FLOW OF ELECTRONICS. AND SO

11 YOU CAN KIND OF THINK OF IT AS A FAUCET THAT HAS A FLOW OF

12 WATER. WHEN YOU HAVE A TRICKLE COMING DOWN ON THE LEFT,

13 THAT'S A LOW CURRENT.

14 AND THEN, WHEN YOU TURN ON THE FAUCET YOU GET THIS HIGH

09:52:46 15 CURRENT. AND THAT IS ESSENTIALLY WHAT YOU CAN THINK ABOUT

16 WHEN WE ARE TALKING ABOUT LOW CURRENTS AND ELECTRICAL CURRENTS

17 IN THIS APPLICATION OR HIGH CURRENTS.

18 (DOCUMENT DISPLAYED)

19 **Q** SO YOU HAVE ANOTHER SLIDE HERE, REGARDING VOLTAGE. WHAT

09:53:01 20 ARE YOU TRYING TO CONVEY?

21 **A** SO, IN -- IN CONTRAST TO CURRENT, ANOTHER ANALOGY THAT WE

22 CAN USE WHEN WE TALK ABOUT VOLTAGE -- AND I THINK WE HAVE

23 HEARD THIS BEFORE -- IS THERE'S A CAPACITOR AND IT HOLDS

24 ELECTRONS OR HOLDS CHARGE.

09:53:16 25 SO YOU CAN THINK OF IT AS LIKE A BUCKET OF WATER. SO

09:53:18 1 USING THAT WATER ANALOGY AGAIN. AND SO, WHEN YOU HAVE A
2 LITTLE BIT OF WATER IN THIS BUCKET, YOU HAVE LOW VOLTAGE. AND
3 THEN, WHEN YOU ACTUALLY HAVE MORE CHARGE OR MORE WATER IN THIS
4 BUCKET YOU HAVE HIGHER VOLTAGE.

09:53:29 5 SO THAT IS KIND OF A NICE, SIMPLE ANALOGY WHEN YOU ARE
6 THINKING ABOUT CURRENTS AND VOLTAGE.

7 (DOCUMENT DISPLAYED)

8 **A** SO THIS IS MEDIUM, YOU KNOW, HIGH.

9 (DOCUMENT DISPLAYED)

09:53:41 10 **Q** SO ARE CURRENT AND VOLTAGE RELATED AT ALL?

11 **A** YES. SO WHEN WE ARE TALKING ABOUT CURRENTS AND VOLTAGE --
12 AND I THINK YOU HAVE PROBABLY GOTTEN THE FEEL FOR THIS ALREADY
13 SO FAR, LISTENING TO ALL THE DISCUSSIONS OVER THE LAST WEEK
14 AND A HALF.

09:53:53 15 THERE IS A MATHEMATICAL RELATIONSHIP, SOMETHING CALLED
16 "OHM'S LAW" THAT RELATES CURRENT AND VOLTAGE. AND THAT
17 RELATIONSHIP IN THIS EXAMPLE HERE IS THROUGH SOMETHING CALLED
18 "A RESISTOR." AND WHAT THAT RESISTOR DOES IS IT RESISTS THE
19 PULL OF CURRENT OR ELECTRONS.

09:54:08 20 AND SO WHAT YOU CAN SEE HERE IS THAT CURRENT IS EQUAL TO
21 VOLTAGE DIVIDED BY THE RESISTANCE. IT'S A VERY SIMPLE
22 MATHEMATICAL FORMULA THAT RELATES THE TWO. AND YOU CAN ALSO
23 CHANGE THE EQUATION AROUND A LITTLE BIT WHERE VOLTAGE EQUALS
24 CURRENT TIMES RESISTANCE.

09:54:26 25 (DOCUMENT DISPLAYED)

09:54:28 1 **Q** NOW, ANOTHER CONCEPT WE HAVE HEARD A LOT ABOUT IS AN
2 OSCILLATOR. ARE YOU FAMILIAR WITH OSCILLATORS, DR. WEI?

3 **A** YES. SO, IN A LOT OF THE CIRCUITS THAT I BUILD, OR MY
4 STUDENTS BUILD OR THE CIRCUITS THAT I'VE BUILT WHILE DOING MY
09:54:43 5 PH.D. AND ALSO WORKING IN INDUSTRY HAD TO DO WITH OSCILLATORS?

6 AND I THINK WE HAVE HEARD ABOUT OSCILLATORS A LITTLE BIT
7 WHERE IT'S ESSENTIALLY -- I THINK, LAST WEEK WE HEARD THAT IT
8 IS THE HEARTBEAT. IT IS KIND OF THIS TIME BASE THAT THE
9 CIRCUITRY, THE ENTIRE CIRCUITRY OPERATES WITH RESPECT TO.

09:55:00 10 AND SO, ANOTHER WAY TO THINK ABOUT IT IS PERHAPS LIKE A
11 PENDULUM CLOCK. RIGHT? YOU SEE THE DIAGRAM ON THE LEFT,
12 THERE IS A LITTLE CLOCK. AND IT'S LIKE AN OLD CLOCK WHERE
13 THAT PENDULUM SWINGS BACK AND FORTH AND BACK AND FORTH. SO
14 THAT IS SETTING THE TIME BASE.

09:55:17 15 AND AN OSCILLATOR IS VERY SIMILAR TO THAT, BUT INSTEAD
16 WHAT IT DOES IS IT PUTS OUT AN ELECTRICAL SIGNAL. AND THAT
17 ELECTRICAL SIGNAL HAS THESE LITTLE SQUARE BUMPS. AND SO
18 THAT'S ONE CYCLE.

19 AND SO WHAT HAPPENS IS THAT THE OSCILLATOR PUTS OUT THESE
09:55:34 20 BUMPS AT A PARTICULAR RATE. IT IS KIND OF A SPEED AT WHICH
21 THESE BUMPS ARE COMING OUT.

22 (DOCUMENT DISPLAYED)

23 **Q** NOW, WHAT ARE YOU SHOWING WITH THIS SLIDE, DR. WEI?

24 **A** SO WE HAD SEEN THOSE SQUARE WAVES IN THE PREVIOUS SLIDE
09:55:52 25 THAT IS COMING OUT OF THE OSCILLATOR. AND SO I WANTED TO

09:55:55 1 PROVIDE A LITTLE BIT OF INFORMATION IN TERMS OF THE FREQUENCY
2 OF THOSE BUMPS COMING OUT. SO IF YOU LOOK AT THE MIDDLE
3 PORTION OF THE SLIDE WHERE IT REFERS TO "HIGH FREQUENCY" WE
4 NOTICE THAT THE BUMPS ARE COMING OUT VERY QUICKLY AT A HIGH
09:56:12 5 RATE.

6 WHEREAS, IF THERE IS A LOW FREQUENCY AND THE PERIOD OF
7 TIME BETWEEN BUMPS IS LONG, THEN THE FREQUENCY IS LOW. THEY
8 ARE COMING OUT AT A LOWER RATE.

9 Q SO HOW -- ANOTHER WORD WE HAVE HEARD IS "HERTZ."

09:56:25 10 A HERTZ.

11 Q CAN YOU EXPLAIN "HERTZ" IN THE CONTEXT OF THIS SLIDE?

12 A SURE. SO "HERTZ" IS A UNIT OF MEASURE FOR FREQUENCY. SO
13 IT'S CYCLES PER SECOND. ANOTHER UNIT OF MEASURE THAT I FORGOT
14 TO MENTION FOR VOLTAGE IS "VOLTS." AND FOR CURRENT, IT'S
09:56:40 15 "AMPS" OR "AMPERES."

16 SO, TYPICALLY, WHEN YOU ARE TALKING ABOUT THESE KIND OF
17 ELECTRICAL SIGNALS YOU ALSO USE THESE UNITS OF MEASURE.

18 Q AND ANOTHER TERM WE HAVE TALKED ABOUT A LOT HERE IS
19 "JITTER."

09:56:53 20 (DOCUMENT DISPLAYED)

21 A YES.

22 Q CAN YOU TELL US A LITTLE BIT ABOUT "FREQUENCY JITTER"?

23 MS. ONDRICK: MR. BERK, COULD YOU --

24 THE WITNESS: I THINK THERE MIGHT BE A MOVIE THAT

09:57:10 25 ILLUSTRATES THIS A LITTLE BIT BETTER.

09:57:15 1 (ANIMATION IS PLAYED)

2 **A** THERE WE GO. SO WHAT WE ARE LOOKING AT HERE, WE HAVE

3 THOSE PULSES, RIGHT? AND YOU CAN THINK OF THIS, PERHAPS, AS

4 THE CLOCK SIGNAL COMING OUT OF THE OSCILLATOR.

09:57:25 5 AND, AS WE NOTICED, THE ONE IN THE MIDDLE STAYED THERE

6 BECAUSE THAT'S KIND OF THE FRAME OF REFERENCE. AND THEN, THE

7 OTHER TWO PULSES KIND OF BLUR BACK AND FORTH, BACK AND FORTH.

8 AND SO WHAT'S HAPPENING HERE IS THAT THE FREQUENCY IS

9 GETTING LOWER, AND THEN GETTING HIGHER AND GETTING LOWER AND

09:57:41 10 GETTING HIGHER. AND THAT'S WHAT'S SHOWN BY THE TRIANGULAR

11 WAVEFORM ON THE BOTTOM.

12 SO WHAT WE NOTICED WAS THAT THE FREQUENCY IS GOING DOWN,

13 GOING UP, GOING DOWN, AND GOING UP (INDICATING). AND THAT'S

14 DONE INTENTIONALLY. AND THAT IS SOMETHING THAT WE HAVE BEEN

09:57:58 15 TALKING ABOUT CALLED "FREQUENCY JITTER" OR "FREQUENCY

16 HOPPING," AS WELL.

17 **Q** AND SO WHAT YOU HAVE ILLUSTRATED ABOVE IS REALLY AN

18 OSCILLOSCOPE SCREENSHOT OR AN OUTPUT.

19 **A** THAT'S WHAT I'M SHOWING, LIKE WHAT I THINK -- I THINK WE

09:58:14 20 SAW THIS YESTERDAY. THERE WERE SOME PULSES. AND THEN, WHEN

21 YOU HAD JITTER IT WAS MOVING AROUND. AND SO THAT -- I THOUGHT

22 THAT MIGHT BE A NICE WAY TO CONNECT WHAT I'M TALKING ABOUT

23 TODAY WITH WHAT YOU HAVE SEEN SO FAR.

24 **Q** SO, WHEN YOU SEE THE LINES HERE THAT LOOK SORT OF BLURRY

09:58:32 25 AND THAT MOVEMENT, THAT WAS REPRESENTATIVE OF WHEN THE

09:58:34 1 FREQUENCY WENT UP, DOWN, UP, DOWN.

2 **A** YES. THE BLURRING KIND OF SHOWS YOU THAT IT'S MOVING.

3 **Q** THE VARYING. OKAY. AND MAYBE IT MIGHT BE A LITTLE MORE
4 HELPFUL IF WE CAN PUT SOME NUMBERS TO THIS DEMONSTRATIVE.

09:58:50 5 (DOCUMENT DISPLAYED)

6 **A** OKAY. SO IF WE LOOK FOR THE RED LINE, WE NOTICE THAT FOR
7 THAT RED LINE, WHEN IT'S SHORT, IT'S.00001 SECOND. I THINK
8 THAT CORRESPONDS TO THE 100 KILOHERTZ. AND THAT IS A NUMBER
9 THAT WE HAVE BEEN HEARING ABOUT A LOT.

09:59:09 10 AND THEN, WHEN THAT FREQUENCY CHANGES WITH THAT JITTER
11 AND THE PERIOD EXTENDS, THEN THE TIME PERIOD IS CLOSER TO
12 0.00000115. AND THAT CORRESPONDS TO ABOUT 91 KILOHERTZ.

13 AND SO WHAT THIS ILLUSTRATION HERE IS TRYING TO SHOW IS
14 THAT WITH THAT FREQUENCY HOPPING OR FREQUENCY JITTER THE
09:59:33 15 FREQUENCY IS GOING FROM A HUNDRED KILOHERTZ DOWN TO NINETY
16 KILOHERTZ, BACK UP.

17 AND IT IS KIND OF LIKE IF YOU LOOK AT THE SPEEDOMETER IN
18 YOUR CAR, AND YOU ARE DRIVING. YOU ARE DRIVING AT A
19 PARTICULAR SPEED, AND THEN YOU CAN SEE THAT YOU ARE KIND OF
09:59:46 20 SPEEDING UP SOMETIMES. YOU ARE SLOWING DOWN SOMETIMES. AND
21 THAT'S ESSENTIALLY WHAT'S GOING ON HERE.

22 (DOCUMENT DISPLAYED)

23 **Q** SO LET'S JUST TALK A LITTLE BIT ABOUT HOW POWER SUPPLY
24 CONTROLLERS WORK NOW, IF WE COULD.

09:59:59 25 **A** YEAH. SO, I MEAN, I THINK THE CONCEPTS THAT WE HAVE

10:00:03 1 TALKED ABOUT SO FAR ARE RELATIVELY EASY TO UNDERSTAND. AND
2 THEN, WHEN WE ACTUALLY GET TO THE FULL POWER SUPPLY, IT GETS
3 A LOT MORE COMPLICATED.

4 AND, PERHAPS WHAT I CAN DO IS AGAIN USE SOME ANALOGIES TO
10:00:15 5 HELP YOU UNDERSTAND WHAT REALLY IS GOING ON IN TERMS OF THE
6 POWER SUPPLY.

7 AND SO I'VE TRIED TO MAKE THIS RELATIVELY SIMPLE. WHAT WE
8 CAN SEE IN THE DIAGRAM HERE IS THAT YOU HAVE SOME VOLTAGE
9 COMING IN ON THE LEFT-HAND SIDE. THE VAC. AND THAT IS THE
10:00:31 10 VOLTAGE THAT'S COMING OUT OF THE WALL OUTLET.

11 IN THE U.S. AS WE HAVE HEARD IT IS 120 VOLTS. I MEAN,
12 THIS EXAMPLE IS 220, SO THAT MUST BE MAYBE IN EUROPE OR IN
13 ASIA. THAT HAS A HIGHER VOLTAGE ON THE WALL.

14 AND THEN, IT GOES THROUGH A CIRCUIT CALLED "THE BRIDGE
10:00:47 15 RECTIFIER." AND WHAT THAT ESSENTIALLY DOES IS IT TAKES THE
16 WAVEFORM OF THE VOLTAGE IN THE WALL AND ACTUALLY CONVERTS IT
17 INTO A VOLTAGE THAT IS RELATIVELY STABLE, AND IT IS A HIGH
18 VOLTAGE.

19 BUT AS WE HAVE BEEN HEARING, YOU DON'T WANT TO CONNECT
10:01:02 20 THAT HIGH VOLTAGE DIRECTLY TO YOUR CELL PHONE BECAUSE THEN YOU
21 WILL GET DAMAGE TO YOUR CELL PHONE, ESSENTIALLY.

22 AND SO WHAT YOU REALLY WANT TO DO IS STEP DOWN THAT
23 VOLTAGE. YOU WANT TO GO FROM THE HIGH VOLTAGE DOWN TO A LOWER
24 VOLTAGE. AND ONE VERY NICE WAY OF DOING THAT IS USING WHAT'S
10:01:19 25 CALLED A "TRANSFORMER." AND THAT IS THE SQUIGGLY LINES SHOWN

10:01:22 1 IN THE MIDDLE HERE (INDICATING).

2 AND ONE EASY WAY TO THINK ABOUT THIS IS IMAGINE THAT YOU
3 HAVE LIKE A BIG RESERVOIR OF CHARGE. MAYBE IT'S LIKE YOU HAVE
4 A SWIMMING POOL. AND YOU WANT TO FILL UP A SMALLER SWIMMING
10:01:36 5 POOL. AND SO WHAT YOU WOULD DO IS TAKE A BUCKET AND SCOOP
6 WATER FROM THE BIG POOL, DUMP IT INTO THE LITTLE POOL. AND
7 YOU KEEP ON DOING THAT.

8 SO THAT IS ESSENTIALLY WHAT THAT SWITCH IS DOING. AND
9 THAT IS WHY I USE THE FINGER FOR THE CONTROLLER, BECAUSE IN
10:01:50 10 THAT CASE, I'M THE CONTROLLER, TAKING WATER FROM A BIG BUCKET,
11 PUTTING IT INTO A LITTLE BUCKET. AND DEPENDING ON HOW QUICKLY
12 I DO IT, IT TELLS ME HOW MUCH WATER I'M TRANSFERRING OVER.

13 AND ALSO, I CAN TAKE A BIG SCOOP, OR I CAN TAKE A LITTLE
14 SCOOP. AND THAT RELATES TO THE DUTY CYCLE THAT WE HAVE BEEN
10:02:09 15 TALKING ABOUT.

16 IF I TAKE A BIG SCOOP EVERY TIME I'M TRANSFERRING A LOT OF
17 WATER. IF I TAKE LITTLE SCOOPS I'M TRANSFERRING LESS WATER.
18 OR IF I DON'T SCOOP THAT OFTEN, THEN, AGAIN, I'M TRANSFERRING
19 LESS WATER.

10:02:23 20 AND SO THAT'S KIND OF AN ANALOGY THAT WE CAN USE TO TRY TO
21 UNDERSTAND THE POWER SUPPLY CONTROLLER.

22 **Q** AND THEN, HOW DOES THAT RELATE SORT OF TO THE PULSES THAT
23 YOU HAVE SHOWN UP HERE (INDICATING) ON THIS PART OF THE
24 DEMONSTRATIVE?

10:02:36 25 **A** RIGHT. SO AS FAR AS THE PULSES ARE CONCERNED, WHEN THE

1 SWITCH IS CONDUCTING OR WHEN THE SWITCH, POWER SWITCH IS ON,
2 THEN IT'S THAT GREEN LINE.

3 AND SO THERE'S CURRENT THAT'S CONDUCTING THROUGH THE
4 TRANSFORMER. AND THAT IS EQUIVALENT TO -- I'M TAKING A, YOU
10:02:52 5 KNOW, A SCOOP OF WATER. AND SO, FOR THE WAVEFORMS, THE WIDTH
6 OF THE WAVEFORM, THAT CORRESPONDS TO THAT GREEN PERIOD.
7 THAT'S KIND OF LIKE HOW MUCH WATER I SCOOP.

8 AND THEN, THE OVERALL TIMING BETWEEN EACH SCOOP IS THAT
9 FREQUENCY. DO I DO IT QUICKLY? OR DO I DO IT SLOWLY?

10:03:16 10 **Q** OKAY. NOW, DR. WEI, I WOULD LIKE TO TALK ABOUT YOUR
11 ANALYSIS OF THE FAIRCHILD PRODUCTS, AND THE POWER INTEGRATIONS
12 PATENTS, IF WE COULD.

13 **A** OKAY.

14 (DOCUMENT DISPLAYED)

10:03:29 15 **Q** SO, ACTUALLY BEFORE WE GET TO THIS SLIDE, WHAT TYPES OF
16 MATERIALS RELATING TO THE PATENTS DID YOU REVIEW?

17 **A** SO, IN RELATION TO THE PATENTS FOR THIS LITIGATION, WE
18 HAVE TO LOOK THROUGH A LOT OF DOCUMENTS. I MEAN, THERE IS --
19 YOU SEE THE STACK OF DOCUMENTS HERE (INDICATING).

10:03:45 20 LUCKILY NOW WE HAVE COMPUTERS, SO THEY ARE ALL KIND OF IN
21 PDF'S.

22 SO I LOOKED AT DATASHEETS OF THE PRODUCTS AT ISSUE. I
23 LOOKED AT THE APPLICATION NOTES, WHICH ARE KIND OF LIKE
24 DATASHEETS, BUT THEY PROVIDE ADDITIONAL INFORMATION IN TERMS
10:03:57 25 OF HOW YOU USE THOSE PRODUCTS.

10:04:00 1 THERE IS THE SCHEMATICS. AND THE SCHEMATICS, BASICALLY
2 YOU CAN THINK ABOUT AS BEING THE BLUEPRINTS OF THE DESIGN. SO
3 IT IS KIND OF LIKE THE BLUEPRINTS FOR YOUR HOME. THESE ARE
4 THE BLUEPRINTS FOR THE DEVICE THAT IS BEING BUILT.

10:04:16 5 THERE IS ALSO ADDITIONAL INFORMATION THAT YOU CAN GET FROM
6 COMPANIES WITH RESPECT TO KIND OF THE DESIGNS AND HOW TO USE
7 THEM, AS REFERENCE DESIGNS.

8 AND ALSO THERE IS THE TESTING, THE RESULTS OF THE TESTING
9 THAT WE HAVE BEEN TALKING ABOUT FOR LIKE THE LAST
10:04:28 10 DAY-AND-A-HALF MAYBE. AND SO, I HAVE LOOKED AT THOSE, AS
11 WELL, AND RELIED ON ALL OF THIS INFORMATION TOGETHER.

12 AND IT'S FOR A SET OF WHAT WE CALL THE "REPRESENTATIVE"
13 PRODUCTS. THESE ARE THE PRODUCTS THAT DR. KELLEY HAD
14 IDENTIFIED AS BEING REPRESENTATIVE OF A LARGER NUMBER OF
10:04:47 15 PRODUCTS THAT POWER INTEGRATIONS HAS ACCUSED.

16 (DOCUMENT DISPLAYED)

17 **Q** SO, YOU IDENTIFIED A LOT OF DIFFERENT KIND OF DOCUMENTS.
18 BUT YOU ACTUALLY WENT ONE STEP FURTHER, RIGHT? YOU LOOKED AT
19 TESTING.

10:05:01 20 **A** RIGHT.

21 **Q** OKAY. SO CAN YOU TELL US A LITTLE BIT ABOUT THE TESTING
22 THAT YOU REQUESTED?

23 **A** SURE. SO, WHAT WE'RE LOOKING AT HERE IS A SET OF
24 INSTRUCTIONS THAT -- YOU KNOW, THE DESCRIPTION HERE IN THIS
10:05:17 25 DOCUMENT, WHAT IT'S DOING IS IT'S SUMMARIZING ALL OF THE

1 INSTRUCTIONS FOR THE TESTING THAT I HAD REQUESTED FROM
2 POWER -- FROM FAIRCHILD.

3 AND SO, WHAT I THOUGHT WAS: OKAY, LOOKING THROUGH THE
4 DOCUMENTATION, THE SCHEMATICS, THE DATASHEETS, THE APPLICATION
5 NOTES, YOU CAN GET A LOT OF INFORMATION FROM ALL THAT. AND SO
6 I CAN FORM MY OPINIONS.

7 AND THEN, I THOUGHT, HMM, IT WOULD BE NICE TO ALSO TEST
8 THESE PRODUCTS AND CONFIRM, YOU KNOW, WHAT THE DATASHEETS ARE
9 SAYING, MY UNDERSTANDING OF HOW THESE DEVICES OPERATE. AND
10 THEN, KIND OF THE PROOF IS IN THE PUDDING.

11 **Q** NOW, HOW DID YOU COMMUNICATE THESE INSTRUCTIONS TO THE
12 ENGINEERS AT FAIRCHILD?

13 **A** SO, INITIALLY WHEN THINKING ABOUT THE TESTING THAT I WAS
14 HOPING TO DO WITH THESE PRODUCTS -- AND KIND OF TIME WAS
15 SHORT -- WHAT I DID WAS TO DRAFT AN INITIAL EMAIL. AND I SENT
16 IT TO THE FAIRCHILD ATTORNEYS.

17 **MR. POLLACK:** OBJECTION.

18 **THE COURT:** EXCUSE ME?

19 **MR. POLLACK:** OBJECTION. DISPLAYING THINGS THAT
20 AREN'T IN EVIDENCE.

21 **THE COURT:** OKAY. NOW --

22 **MS. ONDRICK:** I TOOK IT DOWN.

23 **THE COURT:** ALL RIGHT. LET ME ASK YOU, AS LONG AS WE
24 HAVE THE INTERRUPTION -- IT IS ABOUT FIVE AFTER 10:00 -- WERE
25 YOU GOING INTO THE TESTING SUBJECT AT THIS POINT?

10:06:34 1 **MS. ONDRICK:** WE WERE JUST GOING TO DO A LITTLE
2 SETUP, AND THEN GO INTO THE OPINIONS. SO, NO, WE ARE NOT
3 GOING DIRECTLY INTO THE TESTING SETUP.

4 **THE COURT:** OH. WELL, WOULD THIS BE A GOOD TIME TO
10:06:44 5 BREAK? OR ARE THERE A COUPLE OF QUESTIONS YOU WANT TO FINISH
6 UP YOUR LITTLE MODULE WITH?

7 **MS. ONDRICK:** YOU KNOW, I THINK IT IS A GOOD TIME TO
8 BREAK, AND THEN WE CAN JUST START FROM HERE. THAT'S FINE.

9 **THE COURT:** ALL RIGHT. FINE.

10:06:55 10 SO, LADIES AND GENTLEMEN, WE ARE GOING TO TAKE 15 MINUTES.

11 DR. WEI, IF YOU WILL STAND BY UNTIL THEY CLEAR PAST YOU.

12 ALL RIGHT. FIFTEEN MINUTES, LADIES AND GENTLEMEN.

13 (JURY EXCUSED)

14 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE

10:07:10 15 PRESENCE OF THE JURY)

16 **THE COURT:** OKAY. THE JURORS HAVE STEPPED OUT. YOU
17 MAY STEP DOWN, DR. WEI. OKAY.

18 SO WE WILL BE IN OUR BREAK.

19 COME BACK, I GUESS, 20 AFTER. THANK YOU,

10:07:29 20 (RECESS TAKEN FROM 10:05 TO 10:20 A.M.)

21 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
22 PRESENCE OF THE JURY)

23 **THE CLERK:** PLEASE COME TO ORDER.

24 **THE COURT:** ALL RIGHT. IF YOU ARE ALL READY, WE WILL
10:22:23 25 CALL THE JURY BACK IN.

10:22:25 1 (THE FOLLOWING PROCEEDINGS WERE HELD IN THE PRESENCE OF
2 THE JURY)

3 **THE COURT:** PLEASE BE SEATED, AND WE WILL CONTINUE.
4 LET'S SEE WHERE -- DR. WEI, WOULD YOU COME BACK TO THE STAND,
10:22:55 5 PLEASE?

6 (REQUEST COMPLIED WITH BY THE WITNESS)

7 **THE COURT:** OKAY.

8 **THE WITNESS:** THANK YOU, YOUR HONOR.

9 **THE COURT:** PLEASE BE SEATED.

10:23:08 10 ALL RIGHT, MS. ONDRICK.

11 **BY MS. ONDRICK:**

12 **Q** WELCOME BACK, DR. WEI.

13 **A** THANK YOU.

14 **Q** SO LET'S PICK UP WHERE WE LEFT OFF ON THE TESTING
10:23:16 15 INSTRUCTIONS.

16 **MS. ONDRICK:** AND, YOUR HONOR, I OFFER DX 2706. I
17 DON'T BELIEVE THERE WAS ANY OBJECTION.

18 **MR. POLLACK:** ACTUALLY, THERE WAS AN OBJECTION. IT
19 WAS OBJECTED TO. IT IS HEARSAY.

10:23:29 20 **THE COURT:** OH, OKAY. OH, OKAY. IS IT UP THERE OR
21 IS IT OFF NOW?

22 **MS. ONDRICK:** IT IS OFF NOW.

23 **THE COURT:** WELL, IF -- DOES THE WITNESS HAVE THE
24 EXHIBIT? YOU COULD TRY TO LAY A FOUNDATION. I'M NOT SURE
10:23:42 25 WHAT IT IS.

10:23:43 1 **MS. ONDRICK:** YES, HE DOES.

2 **BY MS. ONDRICK:**

3 **Q** COULD YOU PLEASE TURN IN YOUR BINDER TO DX 2706?

4 **A** WHICH VOLUME IS THIS IN? DO WE KNOW?

10:23:55 5 **Q** LET ME CHECK. SHOULD BE VOLUME 1.

6 **A** 2706?

7 **Q** CORRECT.

8 **A** OKAY. SO I SEE DX 2706.

9 **Q** AND, IS THIS AN EMAIL THAT YOU PREPARED?

10:24:19 10 **A** YES, IT IS.

11 **Q** AND COULD YOU PLEASE TELL US WHAT'S IN THIS EMAIL?

12 **MR. POLLACK:** OBJECTION, YOUR HONOR.

13 **THE COURT:** JUST GENERALLY, THE CONTENT OF IT. IN
14 OTHER WORDS, WHAT TYPE OF CONTENT IS IT, NOT WHAT THE EXACT
10:24:31 15 CONTENT IS.

16 **THE WITNESS:** OKAY. SO, THIS IS AN EMAIL THAT I SENT
17 JULY 24TH, 2013, TO THE ATTORNEYS AT FAIRCHILD. AND IT IS AN
18 EMAIL THAT DESCRIBES SOME TESTS THAT I WAS REQUESTING.

19 **THE COURT:** OKAY. BECAUSE I DON'T HAVE THAT IN FRONT
10:24:54 20 OF ME, I DON'T KNOW IF IT SIMPLY CONTAINS INSTRUCTIONS:
21 "PLEASE RUN THESE TESTS," FOR EXAMPLE, OR WHETHER IT HAS OTHER
22 COMMENTARY AROUND IT. SO I WOULD HAVE TO SEE.

23 **MS. ONDRICK:** MAY I GRAB A COPY, YOUR HONOR?

24 **THE COURT:** YOU MAY.

10:25:13 25 (DOCUMENT HANDED UP TO THE COURT)

10:25:21 1 **THE COURT:** THANK YOU.

2 (THE COURT EXAMINES DOCUMENT)

3 **THE COURT:** IN GENERAL, THERE ARE SIMPLY DIRECTIONS
4 TO DO THINGS. BUT, THERE ARE SOME WHAT I WOULD CALL MORE OR
10:26:11 5 LESS DECLARATIVE STATEMENTS ALSO ABOUT THE WITNESS'S OPINION
6 ESSENTIALLY, REGARDING THE TEST. NOT MANY SENTENCES OF THAT
7 NATURE, BUT THERE ARE SOME.

8 ARE YOU LOOKING AT A COPY OF THIS? DOES EVERYBODY HAVE A
9 COPY?

10:26:37 10 **MR. POLLACK:** I HAVE A COPY, YOUR HONOR.

11 **THE COURT:** DO YOU HAVE ONE, MS. ONDRICK?

12 **MS. ONDRICK:** I GAVE YOU MY COPY, YOUR HONOR, BUT I
13 CAN GET ANOTHER ONE.

14 **THE COURT:** OH, WELL, UNDER "TEST 2," THERE'S A
10:26:46 15 SENTENCE THAT AT THE TOP, DESCRIBES MORE OR LESS SOMETHING
16 ABOUT THE TEST AS OPPOSED TO JUST SAYING "I WANT YOU TO DO
17 THIS TEST, AND HERE'S HOW I WANT YOU TO DO IT."

18 I THINK -- SEE IF THERE WAS ONE OTHER -- I SUPPOSE UNDER
19 "TEST 3," THE SECOND SENTENCE MIGHT BE CONSIDERED SOMEWHAT
10:27:20 20 DESCRIPTIVE. BUT, IT'S MORE OR LESS, I THINK, IN THE FORM OF
21 A DIRECTION.

22 LET ME ASK YOU, MR. POLLACK, IF I OVERRULE YOUR HEARSAY
23 OBJECTION UNDER RULE 801, ESSENTIALLY, DESCRIBING WHAT A
24 HEARSAY STATEMENT IS, AND FINDING THAT THIS DOES NOT QUALIFY
10:27:44 25 IN THE MAIN AS A HEARSAY STATEMENT, BUT RATHER, A COMMAND OR

10:27:50 1 ORDER, SO TO SPEAK, TO DO SOMETHING, AS OPPOSED TO A STATEMENT
2 OF SOME SITUATION OR FACT, WITH THE EXCEPTION OF THAT ONE
3 SENTENCE UNDER "TEST 2," AT THE TOP, DO YOU HAVE ANY
4 PARTICULAR CONCERN ABOUT THAT FIRST SENTENCE?

10:28:13 5 **MR. POLLACK:** WELL, IT -- IF YOU ARE GOING TO
6 OVERRULE THE OBJECTION AND LET IT IN, ARE YOU SUGGESTING THAT
7 YOU WILL LET IT IN FOR A LIMITED PURPOSE? I JUST WANT TO
8 UNDERSTAND.

9 **THE COURT:** I'M OVERRULING THE HEARSAY OBJECTION.

10:28:24 10 **MR. POLLACK:** RIGHT.

11 **THE COURT:** I DO NOT BELIEVE THAT IT HEARSAY. ALL
12 RIGHT? IT IS NOT AN OUT-OF-COURT STATEMENT OF -- IT IS NOT AN
13 ASSERTION. ALL RIGHT? EXCEPT IN THAT PARTICULAR INSTANCE,
14 AND PERHAPS THE ONE COMMENT THAT IS SOMEWHAT DESCRIPTIVE UNDER
10:28:45 15 "TEST 3" AT THE START OF THE SECOND SENTENCE, IS ALSO A
16 STATEMENT OF FACT, IF YOU WILL.

17 THE REST ARE NOT STATEMENTS OF FACT. IT'S LIKE SOMEONE
18 SAYS "GO DO THIS." ALL RIGHT? THAT'S NOT HEARSAY. A
19 QUESTION IS NOT HEARSAY. OKAY.

10:29:04 20 **MR. POLLACK:** AND YOU ARE ASKING IF MY CONCERN IS
21 THAT WE SHOULD EXCLUDE THOSE TWO --

22 **THE COURT:** YEAH, DO THOSE TWO THINGS REALLY CAUSE
23 YOU ANY CONCERN? IF THEY DO, I CAN HAVE THEM REDACTED.
24 THAT'S NOT TO SUGGEST IF YOU DON'T OBJECT TO THOSE SEPARATELY,
10:29:19 25 THAT YOU ARE WAIVING ANY OBJECTION YOU HAVE ALREADY MADE. I'M

10:29:25 1 JUST SAYING --

2 **MR. POLLACK:** FAIR ENOUGH, YOUR HONOR. THE
3 REDACTIONS ARE UNNECESSARY.

4 **THE COURT:** OKAY. ALL RIGHT. AND IF YOU FIND SOME
10:29:32 5 AUTHORITY THAT SUGGESTS THAT THE RULE MIGHT COVER THIS TYPE OF
6 A COMMENT OR REMARK, OR WHAT HAVE YOU, THEN I WOULD CERTAINLY
7 BE PREPARED TO RECONSIDER.

8 AT A MINIMUM, IT WOULD GO TO SHOW THE STATE OF MIND OF THE
9 PEOPLE WHO RAN THE TEST. BUT, THAT WOULD BE AN EXCEPTION TO
10:29:52 10 THE HEARSAY RULE.

11 SO IF I'M WRONG ON POINT A, I'LL GO WITH POINT B.

12 ALL RIGHT.

13 MS. LUCERO, DO YOU WANT TO GIVE THIS EXHIBIT BACK TO
14 MS. ONDRICK, PLEASE?

10:30:04 15 (DOCUMENT HANDED DOWN)

16 **MS. ONDRICK:** YOUR HONOR, I OFFER DX 2706.

17 **THE COURT:** ALL RIGHT. THEN, OVER THE OBJECTION AND
18 FOR THE REASONS NOTED, I WILL ADMIT DX 2706.

19 (TRIAL EXHIBIT 2706 RECEIVED IN EVIDENCE)

10:30:16 20 **BY MS. ONDRICK:**

21 **Q** SO DR. WEI, I BELIEVE YOU MENTIONED THIS WAS A JULY 24,
22 2013 EMAIL FROM YOU. CORRECT?

23 **A** YES, IT IS.

24 **Q** AND, WHAT ARE YOU REQUESTING IN THIS EMAIL?

10:30:31 25 (DOCUMENT DISPLAYED)

10:30:33 1 **A** IN THIS EMAIL I'M REQUESTING TESTS FOR THE FOLLOWING PARTS
2 THAT ARE LISTED UP ON TOP. THE SG6841, FAN103, SG5851, AND
3 THE SG5841J. AND I BELIEVE I MADE A TYPO THERE. IT SHOULD BE
4 SG5841 AND NOT 51.

10:30:53 5 AND, THE REST OF THE EMAIL GOES THROUGH AND KIND OF
6 DESCRIBES THE DIFFERENT KINDS OF TESTS THAT I WOULD LIKE TO BE
7 DONE. AND, IN THE VERY BEGINNING, SO, IF YOU NOTICE, THIS
8 EMAIL WAS WRITTEN AT 7:00 P.M. IF MY MEMORY SERVES CORRECTLY,
9 I THINK I HAD A CONVERSATION WITH THE ATTORNEYS EARLIER IN THE
10:31:15 10 EVENING.

11 I TYPED THIS UP, BUT IT WAS ROUGH. SO I STARTED IT WITH,
12 OR PREFACED IT, WITH: "WE SHOULD PROBABLY ITERATE AT LEAST
13 ONCE A MONTH."

14 **Q** AND THEN, DID AN ITERATION OF YOUR TEST RESULTS OCCUR?

10:31:29 15 **A** YES.

16 **Q** CAN YOU DESCRIBE THAT PROCESS FOR US?

17 **A** WELL, THE INSTRUCTIONS WERE A BIT ROUGH, AND SO I THINK
18 THERE WERE SOME CLARIFICATIONS REQUESTED. AND SO I HAD SOME
19 CONVERSATIONS ABOUT THAT.

10:31:41 20 AND THEN, LATER ON, I GOT SOME RESULTS, AND THEN HAD
21 CONVERSATIONS WITH MR. W.H. HUANG.

22 AND I BELIEVE THERE WERE SOME OTHER PEOPLE ON THE
23 CONFERENCE CALL. I DON'T RECALL EXACTLY WHO THEY WERE.

24 AND THEN, SOME OTHER TESTS WERE PERFORMED. AND THEN, YOU
10:31:58 25 KNOW, KIND OF TOWARDS THE DEADLINE IN AUGUST, EVERYTHING GOT

10:32:03 1 TOGETHER, PUT EVERYTHING INTO THE REPORTS, AND THEN THE
2 REPORTS WERE SERVED.

3 Q SO THERE'S BEEN SOME DISCUSSION ABOUT WHAT TESTS YOU
4 REQUESTED, WHAT TESTS YOU DIDN'T REQUEST. SO LET'S JUST JUMP
10:32:14 5 INTO THAT, IF WE COULD.

6 A OKAY.

7 (DOCUMENT DISPLAYED)

8 Q SO, THIS IS YOUR TEST REQUEST.
9 AND IT'S COMPARED TO THE FINAL TEST INSTRUCTIONS. SO IF
10:32:27 10 YOU COULD TELL ME, I SEE WE HAVE -- YOU HAVE HIGHLIGHTED THREE
11 DIFFERENT TESTS HERE. SO WHAT IS TEST 1?

12 A SO TEST 1, AS IS LABELED THERE, IT SAYS "FREQUENCY
13 VARIATION TESTS," AND YOU CAN'T SEE THE WORD THAT IS
14 HIGHLIGHTED IN YELLOW, BUT ESSENTIALLY WHAT I'M ASKING FOR IS:
10:32:45 15 OKAY, SET UP THE EQUIPMENT. SET UP THE BOARD IN A PARTICULAR
16 MANNER. ADJUST THE LOAD CURRENT. OBSERVE THE FREQUENCY, MAKE
17 THOSE MEASUREMENTS, GET THE DATA.

18 AND I WOULD LIKE TO -- AND ALSO, I THINK, IT WAS ALSO A
19 REQUEST TO PLOT IT OUT, SO THAT I CAN EASILY SEE THE DATA.

10:33:04 20 Q SO THERE IS NO DISPUTE THAT YOU REQUESTED TEST 1, THE
21 FREQUENCY VARIATION TEST. CORRECT?

22 A YES.

23 Q OKAY. LET'S TAKE A LOOK AT TEST 2, THE CYCLE-SKIPPING
24 TEST.

10:33:16 25 A SO, IN CONTRAST TO TEST 1, TEST 2 WERE A DIFFERENT SET OF

10:33:20 1 TESTS TO KIND OF UNDERSTAND ANOTHER ASPECT OF THESE DEVICES.
2 AND SO, IT'S TO -- AND, I'M ALLOWED TO GO THROUGH THE
3 DETAIL?

4 Q (NODS HEAD)

10:33:34 5 A OKAY. AND SO WHAT I SAY IN TEST 2 IS THAT THIS TEST IS TO
6 SHOW THAT PARTS CYCLE SKIP DURING NO-LOAD CONDITIONS, GREEN
7 MODE. AND SO IT DESCRIBES HOW YOU SET IT UP.

8 AND THIS IS KIND OF THE FIRST STEP IN TRYING TO EXPLAIN,
9 YOU KNOW, HOW YOU WOULD SET UP THE -- THE SETTINGS IN ORDER TO
10:33:53 10 GET THIS CYCLE-SKIPPING TEST.

11 Q AND SO, FOR TEST 2, YOU SUGGESTED THE DYNAMIC LOAD
12 TESTING. ISN'T THAT CORRECT?

13 A YES. IF YOU LOOK IN THE EMAIL, THERE IS A DESCRIPTION
14 WHERE I EXPLAIN HOW YOU TAKE THE LOAD CURRENT AND YOU HAVE IT
10:34:14 15 GO UP AND DOWN. AND THAT WAS THE A DYNAMIC LOAD TEST.

16 Q AND THEN, THERE WAS A LITTLE BIT OF CLARIFICATION ON THE
17 SPECIFICS OF THE DYNAMIC LOAD TEST YOU REQUESTED.

18 A YES.

19 Q OKAY. NOW, WHAT ABOUT THE NO-LOAD OR SURGE TESTING?

10:34:28 20 A SO AS WE HAD HEARD -- I THINK IT WAS YESTERDAY AND A
21 LITTLE BIT THIS MORNING -- THE SURGE -- THE SURGE TEST WAS A
22 TEST THAT MR. W.H. HUANG HAD SUGGESTED.

23 AND, ONCE I HEARD IT, I THOUGHT THAT WAS A GOOD IDEA. SO
24 I SAID, "YEAH, PLEASE DO THAT TEST SO I CAN SEE THE RESULTS."

10:34:47 25 YEAH.

10:34:48 1 Q OKAY. AND THEN, NOW LET'S TALK A LITTLE BIT ABOUT TEST 3.

2 A SO TEST 3 IS, YOU KNOW, AS I WAS SITTING THERE THINKING

3 ABOUT THESE VARIOUS TESTS, I JOTTED DOWN ANOTHER DIFFERENT

4 KIND OF TEST, WHICH IS LABELED THERE AS "ON/OFF TESTING."

10:35:04 5 AND THEN, DIDN'T FOLLOW UP WITH IT AT ALL, AND SO THAT WAS

6 NOT -- THAT IS NOT A PART OF THE RESULTS THAT I RELIED ON, AND

7 THAT WENT INTO MY EXPERT REPORT.

8 Q NOW, DOES TEST 3 RELATE TO A --

9 (DOCUMENT DISPLAYED)

10:35:21 10 Q SORRY ABOUT THAT.

11 DOES TEST 3 RELATE TO A PARTICULAR ELEMENT OF THE CLAIMS?

12 DID YOU HAVE SOMETHING IN MIND WHEN YOU REQUESTED TEST 3?

13 A YES. SO, IT'S NOT FOUND IN ALL THE CLAIMS, I DON'T

14 BELIEVE, BUT THERE ARE CERTAIN ELEMENTS IN THE CLAIMS. AND,

10:35:39 15 IT HAS TO DO WITH MEASURING THE "ON" TIME AND LOOKING AT WHAT

16 IS GOING ON.

17 AND, I THINK, YOU KNOW, IT'S -- SINCE IT'S NOT ONE OF THE

18 CORE ASPECTS -- TEST 1 AND TEST 2 WERE REALLY LOOKING AT THE

19 CORE ASPECTS OF THE CLAIMS THAT ARE COMMON TO ALL THE CLAIMS.

10:35:56 20 THOSE ARE THE ONES I WAS REALLY FOCUSING ON.

21 Q SO DID YOU OFFER ANY OPINIONS IN THIS CASE ON THE "ON"

22 TIME/OFF TIME CLAIM LIMITATIONS?

23 A IN TERMS OF NONINFRINGEMENT, NO.

24 (DOCUMENT DISPLAYED)

10:36:13 25 Q LET'S GO AHEAD AND GO TO THE NEXT SLIDE.

10:36:18 1 SO YOU WERE HERE YESTERDAY AND SAW THE TEST EQUIPMENT.
2 AND IS THIS THE SAME TEST EQUIPMENT THAT WAS USED FOR THE
3 TESTS YOU HAD CONDUCTED FOR YOU?

4 **A** I UNDERSTAND THAT THE EQUIPMENT THAT'S SHOWN IN THIS
10:36:32 5 FIGURE, THAT'S A PICTURE OF THE TEST SETUP WHEN THE ENGINEERS
6 AT FAIRCHILD PERFORMED THE TESTS. AND, IF YOU RECALL, THEY'RE
7 NOT ORGANIZED IN THE SAME WAY I BELIEVE THEY WERE ORGANIZED ON
8 THE CART. BUT THE OSCILLOSCOPE WAS KIND OF FRONT AND CENTER.
9 AND THEN, THERE WERE OTHER EQUIPMENT UNDERNEATH.

10:36:50 10 AND MY UNDERSTANDING IS THEY BROUGHT THE EXACT EQUIPMENT
11 THAT WAS USED TO TEST HERE.

12 **Q** SO, LET'S TALK A LITTLE BIT ABOUT THE DATA THAT THE
13 OSCILLOSCOPE CAN COLLECT, AND MAYBE YOU COULD EXPLAIN A LOT OF
14 THAT TEST.

10:37:02 15 **A** OKAY.

16 (DOCUMENT DISPLAYED)

17 **MS. ONDRICK:** AND, FOR THE RECORD, THIS IS
18 DEFENDANTS' EXHIBIT 4288, WHICH COMES FROM DX5709, WHICH IS
19 ALREADY OF RECORD.

10:37:17 20 **THE WITNESS:** SO, WHAT WE SEE IS -- AND WHAT IS BLOWN
21 UP IS THE SCREENSHOT. AND WE HAVE BEEN HEARING A LOT ABOUT
22 SCREENSHOTS, PROBABLY A LITTLE TOO MUCH ABOUT SCREENSHOTS
23 YESTERDAY.

24 AND NOTICE THAT THE BACKGROUND IS KIND OF WHITE, AND THAT
10:37:33 25 IS JUST THE WAY THAT THE OSCILLOSCOPE PUTS OUT THE DATA. IF

10:37:36 1 YOU ACTUALLY -- WHEN YOU SAW IT ON THE SCREEN YESTERDAY THERE
2 WAS A BLACK BACKGROUND. BUT WHEN THE -- WHEN YOU SAVE THE
3 SCREENSHOT ON THE OSCILLOSCOPE, IT SAVES IT INTO A PDF FORMAT,
4 AND THEN JUST HAS A WHITE BACKGROUND.

10:37:51 5 PROBABLY IF YOU PRINTED OUT A LOT OF BLACK, THEN YOU WOULD
6 BE WASTING A LOT OF INK. SO IT'S BETTER THAT IT IS WHITE.

7 AND WHAT YOU SEE IS A NUMBER OF WAVEFORMS. AND WE HAD
8 SEEN THIS BEFORE, AS WELL.

9 THE RED LINE IS THE SIGNAL THAT IS TURNING THE POWER
10:38:07 10 SWITCH ON AND OFF. AND THEN, THERE ARE OTHER SIGNALS AS PART
11 OF THAT SCREENSHOT. ONE IS THE -- I THINK THE BLUE LINE IS
12 CALLED THE "BULK VOLTAGE." AND THAT IS JUST KIND OF THE
13 HIGH-VOLTAGE INPUT TO THE POWER CONVERTER.

14 AND THEN, THERE IS A YELLOW LINE. AND IT IS LABELED
10:38:31 15 "FEEDBACK." THERE IS ACTUALLY A PIN ON THE PRODUCT THAT WAS
16 BEING TESTED.

17 AND THEN, THE GREEN LINE CORRESPOND TO THE OUTPUT VOLTAGE.
18 AND SO, YOU SEE THE WAVEFORMS THAT WAS CAPTURED BY THE
19 OSCILLOSCOPE AND THEN WAS JUST ESSENTIALLY TRANSFERRED OVER
10:38:46 20 INTO THIS FIGURE, FILE FORMAT.

21 AND THEN, IN ADDITION TO THAT, IF YOU LOOK THERE ARE A SET
22 OF NUMBERS. AND WE SAW THIS YESTERDAY, AS WELL, WHERE THE
23 NUMBERS PROVIDE DATA VALUES IN TERMS OF THE VOLTAGE. IN THIS
24 CASE I'VE HIGHLIGHTED THE MEAN OR THE AVERAGE VOLTAGE
10:39:06 25 (INDICATING), AND THE FREQUENCY OF THE SWITCHING ACTIVITY THAT

1 WAS CAPTURED BY THE OSCILLOSCOPE.

2 SO THAT'S THE DATA THAT I WAS RELYING ON.

3 AND, WHAT I'LL SHOW YOU LATER ARE -- IS KIND OF A PLOT,
4 USING A SIMPLE PLOTTING TOOL THAT SAID -- THAT PICKS OUT THIS

5 ONE DATA POINT, PUTS IT ON THE X AXIS, TAKES THIS OTHER DATA,

6 AND THEN I COULD PLOT OUT WHAT THESE NUMBERS ON A NUMBER OF

7 THESE DIFFERENT SHEETS OF PAPER OR PDF FILES, HOW YOU CAN PLOT
8 THOSE OUT.

9 Q THANK YOU, DR. WEI.

10 SO LET'S GO AHEAD AND MOVE ON TO YOUR OPINIONS IN THIS
11 CASE. AND. HOW ABOUT IF WE START WITH THE '079 PATENT?

12 A OKAY.

13 (DOCUMENT DISPLAYED)

14 Q DO YOU HAVE AN OPINION WITH REGARD TO WHETHER THE
15 FAIRCHILD ACCUSED PRODUCTS MEETS THE ASSERTED CLAIMS OF THE
16 '079 PATENT?

17 A YES. SO I'VE LOOKED AT THE PATENT, THE '079 PATENT, AND
18 ALL THE MATERIAL THAT IS RELEVANT TO THE '079, THE PROSECUTION
19 HISTORY.

20 I'VE ALSO LOOKED AT THE PRODUCTS, THE DATASHEETS, THE
21 APPLICATION NOTES ON THE DATA.

22 AND THEN, FOR THE ASSERTED CLAIMS, 31, 34, 38 AND 42, IT
23 IS MY OPINION THAT THE ACCUSED PRODUCTS ARE -- DO NOT INFRINGE
24 THESE CLAIMS OF THE '079 PATENT.

25 Q OKAY. DID YOU GET ANY GUIDANCE FROM THE COURT IN

10:40:31 1 CONDUCTING YOUR ANALYSIS?

2 **A** YES. SO, WHEN WE LOOK AT THE ASSERTED CLAIMS -- AND I
3 THINK WE HAVE HEARD THIS, YOU KNOW, THROUGHOUT THE LAST WEEK
4 AND A HALF, THERE ARE -- BECAUSE, ESSENTIALLY, WE HAVE TO
10:40:44 5 ABIDE BY THE LANGUAGE, THE WORD IN THE CLAIM. AND, TYPICALLY,
6 WHAT YOU WOULD DO IS JUST GIVE IT AS PLAIN AND ORDINARY
7 MEANING.

8 BUT THEN, THERE ARE TIMES WHERE CERTAIN TERMS ARE IN
9 DISPUTE, LIKE HOW ONE COULD INTERPRET WHAT THAT TERM MEANS.
10:41:02 10 AND THEN, YOU SEEK GUIDANCE FROM THE COURT AS TO HOW SHOULD
11 ONE UNDERSTAND WHAT THIS TERM MEANS.

12 AND SO, THE COURT PROVIDES WHAT IS CALLED A COURT'S "CLAIM
13 CONSTRUCTION."

14 AND THEN, YOU LITERALLY APPLY THAT CONSTRUCTION TO THOSE
10:41:17 15 TERMS IN THE CLAIMS.

16 **Q** AND DID YOU APPLY THOSE CLAIM CONSTRUCTIONS IN YOUR
17 ANALYSIS?

18 **A** YES. WE HAVE TO.

19 (DOCUMENT DISPLAYED)

10:41:27 20 **Q** NOW, AGAIN, WE ARE SHOWING CLAIM 34.

21 CAN YOU TELL US WHAT YOU ARE DEMONSTRATING WITH THE
22 HIGHLIGHTING HERE?

23 **A** SURE. SO RECALL -- I THINK IT WAS LAST WEEK -- WHEN
24 DR. KELLEY WAS TALKING ABOUT THESE CLAIMS AND HOW THE
10:41:41 25 FAIRCHILD PRODUCTS INFRINGE. WHAT HE HAD TO DO WAS

10:41:44 1 ESSENTIALLY GO THROUGH EVERY SINGLE ELEMENT AND TRY TO
2 IDENTIFY HOW THE PRODUCTS HAVE ALL OF THE ELEMENTS FOR A
3 PARTICULAR CLAIM.

4 AND, IN THE -- I THINK THE FIRST DAY OF TRIAL, MR. JACOBS
10:41:58 5 GAVE THAT BOWLING PIN ANALOGY? SO YOU HAD TO HIT A STRIKE IN
6 ORDER TO FIND THAT A -- AN ACCUSED PRODUCT INFRINGES. WHAT
7 I'M GOING TO DO HERE, THOUGH, IS ESSENTIALLY I JUST NEED TO
8 SHOW THAT THERE'S AT LEAST ONE BOWLING PIN REMAINING. YOU
9 DON'T HAVE A STRIKE.

10:42:14 10 AND SO IN THE INTEREST OF TIME WHAT WE HAVE DONE IS
11 FOCUSED IT TO ESSENTIALLY THREE CONTESTED ELEMENTS. AND SO,
12 THESE ARE THE THREE ELEMENTS THAT ARE KIND OF IN -- IN
13 DISPUTE, I GUESS. AND SO I'LL FOCUS ON THOSE THREE.

14 (DOCUMENT DISPLAYED)

10:42:35 15 **Q** AND I SEE HERE YOU HAVE IDENTIFIED THE REPRESENTATIVE
16 PRODUCTS PULLED OUT BY DR. KELLEY.

17 **A** RIGHT. SO, UP TO THIS POINT, THERE'S ALL THESE PRODUCTS.
18 BUT THEN WHAT WERE IDENTIFIED ARE FIVE REPRESENTATIVE
19 PRODUCTS. SO WE JUST ONLY NEED TO LOOK AT THESE FIVE
10:42:51 20 PRODUCTS.

21 AND SO, WHAT I'M JUST SHOWING ON THIS SLIDE IS THAT THE
22 ARGUMENTS THAT I'M GOING TO BE PRESENTING PRETTY MUCH APPLY TO
23 ALL FIVE OF THESE PRODUCTS. AND -- BUT IF THERE'S ANY
24 DIFFERENCES, THEN I'LL NOTE THOSE DIFFERENCES, AS WELL.

10:43:08 25 **Q** AND SO WE JUST SAW THREE MISSING LIMITATIONS. ARE YOU

10:43:13 1 JUST REPEATING THEM HERE?

2 **A** YEAH. SO THIS IS -- THE WORDS WERE DIFFICULT TO SEE WITH
3 THE HIGHLIGHTS BEFORE. SO MAKING IT A LITTLE BIT EASIER TO
4 SEE HERE. SO THE THREE ESSENTIALLY REFERRED TO THE FAIRCHILD
10:43:26 5 PRODUCTS. THEY'RE NOT COUPLED TO SWITCH. THE POWER SWITCH AT
6 A FIXED SWITCHING FREQUENCY.

7 AND I'VE HIGHLIGHTED THAT WORD "FIXED" BECAUSE THAT IS
8 REALLY THE MAIN POINT AT ISSUE HERE. THE FAIRCHILD PRODUCTS
9 ALSO, AS WE HAVE HEARD KIND OF THROUGHOUT THE WEEK, DO NOT
10:43:41 10 INCLUDE A SWITCH IN THE POWER -- IN THE ACCUSED PRODUCTS.

11 AND THEN, THE FAIRCHILD PRODUCTS ARE NOT COUPLED TO VARY
12 THE SWITCHING CYCLE -- THE SWITCHING FREQUENCY WITHOUT
13 SKIPPING CYCLES. WE'LL DIG INTO THIS MUCH MORE, AS WELL.

14 **Q** OKAY. AND SO THE FIRST OPINION THAT WE ARE GOING TO TALK
10:44:01 15 ABOUT RELATES TO THE FIXED SWITCHING FREQUENCY. IS THAT WHAT
16 YOU ARE SHOWING HERE?

17 (DOCUMENT DISPLAYED)

18 **A** YES.

19 **Q** OKAY.

10:44:07 20 (DOCUMENT DISPLAYED)

21 **Q** CAN YOU TELL US WHAT YOU ARE DEMONSTRATING HERE WITH YOUR
22 NEXT SLIDE?

23 **A** SURE. SO KIND OF PROVIDING AN OUTLINE, HIGHLIGHTS IN
24 TERMS OF WHY I DID NOT BELIEVE THAT THE POWER SWITCH SWITCHES
10:44:20 25 AT THIS FIXED SWITCHING FREQUENCY.

10:44:22 1 AND WHAT WE CAN DO, WHAT I'LL SHOW IS THAT THE TECHNICAL
2 DOCUMENTS, THE DATASHEETS, THE APPLICATION NOTES THAT WE HAVE
3 BEEN LOOKING AT SO FAR, THEY SHOW THAT THE SWITCHING FREQUENCY
4 VARIES. OKAY? SO THAT IS NUMBER ONE.

10:44:35 5 THEN, I WILL PROCEED TO SHOW YOU THE TEST RESULTS AND
6 EXPLAIN THE TEST RESULTS, AND WHY THE TEST RESULTS SHOW THAT
7 THE SWITCHING FREQUENCY VARIES.

8 AND THEN, THERE'S ONE OTHER FOR SOME OF THE -- FOR THE
9 REPRESENTATIVE PRODUCTS, IT DOESN'T -- THE SWITCHING FREQUENCY
10:44:55 10 CANNOT BE FIXED. SO I'LL EXPLAIN THAT, AS WELL.

11 (DOCUMENT DISPLAYED)

12 **Q** SO HERE IT LOOKS LIKE YOU ARE SHOWING PART OF A CLAIM
13 CHART. IT LOOKS LIKE YOU HAVE HIGHLIGHTED OUT THE -- OR
14 CALLED OUT THE CONTESTED CLAIM ELEMENTS. IS THAT CORRECT?

10:45:11 15 **A** SO WE HAVE SEEN CHARTS LIKE THIS BEFORE. AND I THINK THE
16 REASON WE DO THIS IS IT KIND OF MAKES IT A NICE,
17 EASY-TO-REMEMBER GRAPHIC.

18 BUT REMEMBER, CLAIM 34 HAS A LOT MORE ELEMENTS. BUT THE
19 THREE THAT ARE BEING CONTESTED, THOSE ARE THE ONES THAT I'VE
10:45:26 20 PUT UP HERE. AND I'VE HIGHLIGHTED THE ONE IN THE MIDDLE,
21 BECAUSE THAT IS THE ONE WE WILL START WITH. AND THEN, WE WILL
22 PROCEED TO THE OTHER ONES, AS WELL.

23 **Q** OKAY. SO WHY DON'T WE GO AHEAD AND GET INTO THAT
24 EXPLANATION?

10:45:36 25 (DOCUMENT DISPLAYED)

10:45:37 1 Q I SEE HERE YOU HAVE IDENTIFIED THE COURT'S CLAIM
2 CONSTRUCTION.

3 A RIGHT. SO FOR THAT PARTICULAR ELEMENT, THERE ARE TWO
4 TERMS, I BELIEVE, THAT WERE CONSTRUED. AND SO I WANTED TO
10:45:48 5 JUST REMIND US OF WHAT THE COURT'S CLAIM CONSTRUCTIONS WERE.

6 AND SO, WITH RESPECT TO "SWITCHING FREQUENCY," THE COURT
7 CONSTRUED IT TO MEAN: "THE NUMBER OF SWITCHING CYCLES OF THE
8 POWER SWITCH PER SECOND."

9 AND THEN, ALSO, FOR THE "FIXED SWITCHING FREQUENCY," THE
10:46:05 10 COURT CONSTRUED IT TO BE "A NON-VARYING NUMBER OF SWITCHING
11 CYCLES PER SECOND."

12 Q SO IS IT EASY FOR US TO THINK OF FIXED FREQUENCY AS
13 NON-VARYING SWITCHING FREQUENCY?

14 A YES.

10:46:21 15 Q AND, COULD WE ALSO THINK OF IT AS NON-VARYING HERTZ?

16 A NON-VARYING HERTZ.

17 (DOCUMENT DISPLAYED)

18 Q ALL RIGHT. DR. WEI, DO YOU RECALL DR. KELLEY PUTTING UP
19 SOME DOCUMENTS FROM FAIRCHILD? AND HE SAID, YOU KNOW, THE
10:46:38 20 SWITCHING FREQUENCY IS FIXED IN THE FAIRCHILD PRODUCTS?

21 A SO, THIS IS A SLIDE THAT I BELIEVE DR. KELLEY SHOWED
22 DURING HIS TESTIMONY LAST WEEK. AND, IF I RECALL CORRECTLY,
23 WHAT HE WAS DOING WAS HIGHLIGHTING THE DESCRIPTION WITHIN THIS
24 APPLICATION NOTE AND SAYING, "HEY, THE APPLICATION NOTE SAYS
10:46:58 25 'FIXED FREQUENCY.'"

10:47:00 1 AND, ACTUALLY, WE JUST SAW THAT THIS MORNING, AS WELL.
2 SO THAT IS JUST IN THAT DESCRIPTION. AND AS WE HEARD FROM
3 MR. W.H., IT IS KIND OF A GENERAL WAY TO GENERALLY DESCRIBE
4 THE PRODUCTS, BUT IF YOU LOOK FURTHER INTO THE SAME DOCUMENT
10:47:17 5 OR DOCUMENTS OF THIS TYPE, YOU NOTICE THAT THERE'S ALL THESE
6 CHARTS THAT WERE BROUGHT UP. AND THESE CHARTS HAVE ALL THESE
7 NUMBERS. AND THAT PROVIDES FURTHER INFORMATION, KIND OF THE
8 DETAILS OF WHAT'S GOING ON AND HOW THESE DEVICES OPERATE.

9 **MS. ONDRICK:** AND, YOUR HONOR, I WOULD LIKE TO OFFER
10:47:34 10 DX 3107. IT IS A DATASHEET. I DON'T BELIEVE IT IS OBJECTED
11 TO.

12 **THE COURT:** I'M --

13 **MR. POLLACK:** NO OBJECTION, YOUR HONOR.

14 **THE COURT:** ALL RIGHT. DX 3107 MAY BE ADMITTED.

10:47:44 15 (TRIAL EXHIBIT 3107 RECEIVED IN EVIDENCE)

16 **THE COURT:** THANK YOU.

17 (DOCUMENT DISPLAYED)

18 **BY MS. ONDRICK:**

19 **Q** SO HERE I SEE YOU HAVE HIGHLIGHTED THE DATASHEET FOR THE
10:47:51 20 FAN103 PRODUCT. CAN YOU TELL US WHAT YOU ARE SHOWING HERE?

21 **A** YES. SO THIS IS ACTUALLY A DIFFERENT PRODUCT FROM THE ONE
22 WE JUST SAW. WE WILL ACTUALLY LOOK AT SG6841 A LITTLE BIT
23 LATER.

24 BUT IF YOU LOOK ON THE COVER OF THE DATASHEET FOR THE
10:48:09 25 FAN103, WHAT WE SEE IS THAT THERE'S A BULLET POINT. IT SAYS:

10:48:14 1 "FIXED PWM FREQUENCY," WHICH WE ALSO ALREADY SAW.
2 AND THEN, AT 50 KILOHERTZ "WITH FREQUENCY HOPPING TO
3 SOLVE EMI PROBLEM."
4 AND IF YOU LOOK FURTHER INTO THIS PARTICULAR DOCUMENT, FOR
10:48:26 5 EXAMPLE, IF YOU LOOK AT FIGURE 24, IT DESCRIBES USING THIS
6 WAVEFORM, THE FREQUENCY HOPPING.
7 AND, RECALL, THIS IS SIMILAR TO THE TUTORIAL PORTION WHERE
8 I TALKED ABOUT HOW THE FREQUENCY IS BEING MODULATED. IT IS
9 HOPPING AROUND, KIND OF GETTING WIDER AND NARROWER.
10:48:47 10 AND SO, YOU KNOW, THE DOCUMENTATION IS ALSO EXPLAINING
11 THIS AND HOW THE FREQUENCY VARIES.
12 Q SO WHY DON'T WE GO AHEAD AND --
13 (DOCUMENT DISPLAYED)
14 Q -- TAKE A LOOK A LITTLE BIT MORE AT WHAT ELSE THE FAN103
10:49:04 15 SHOWS ABOUT ITS SWITCHING FREQUENCY?
16 A SO, WE CAN SEE THAT THE CHARTS ARE PROVIDING GUIDANCE TO
17 SOMEONE THAT IS GOING TO BUY AND UTILIZE THESE PRODUCTS AND
18 MAKE POWER SUPPLIES.
19 THAT THERE'S A CENTER FREQUENCY FOR THE OSCILLATOR. AND
10:49:19 20 ALSO THE OSCILLATOR HAS FREQUENCY HOPPING AND IS HOPPING
21 AROUND AT A PARTICULAR RANGE.
22 AND SO THE CHART SHOWS THERE IS A MINIMUM, TYPICAL MAXIMUM
23 VALUE OF THAT CENTER FREQUENCY, OR THE TARGET FREQUENCY THAT
24 MR. W.H. HUANG WAS TALKING ABOUT. AND THEN, IF WE ALSO LOOK
10:49:37 25 FURTHER DOWN IN THIS CHART, THE -- OR THE TABLE, WE ALSO SEE

10:49:43 1 THAT THERE IS FREQUENCY VARIATION WITH RESPECT TO VDD
2 DEVIATION. SO THAT IS THE VOLTAGE AT WHICH THE DEVICE IS
3 OPERATING AT.

4 AND SO IT VARIES BY 1 TO 2 PERCENT.

10:49:56 5 AND, FURTHERMORE, THE FREQUENCY ALSO VARIES WITH RESPECT
6 TO TEMPERATURE. AND IN THIS PRODUCT, IT VARIES UP TO
7 15 PERCENT.

8 (DOCUMENT DISPLAYED)

9 **Q** NOW, LET'S TAKE A LOOK AT THE FAN5841J. WHAT DOES THE
10:50:13 10 DOCUMENTATION TELL US ABOUT THAT PRODUCT?

11 **A** SO WE ARE LOOKING AT A VERY SIMILAR PORTION OF THE
12 DATASHEET FOR A DIFFERENT PRODUCT: THE 5841J. AND IN THAT
13 OSCILLATOR SECTION, AGAIN, WHAT WE SEE IS THERE IS THE CENTER
14 FREQUENCY OF THE OSCILLATOR. IT ALSO HAS THIS FREQUENCY
10:50:30 15 HOPPING. AND SO IT'S TELLING US HOW MUCH THE FREQUENCY
16 HOPPING LEADS TO CHANGES IN FREQUENCY.

17 AND THEN, AGAIN, KIND OF WHEN WE LOOK TOWARDS THE LOWER
18 PORTION OF THIS CHART, THERE'S THE FREQUENCY DEVIATION OR
19 FREQUENCY VARIATION WITH CHANGES IN THE INPUT VOLTAGE OR THE
10:50:47 20 VDD.

21 AND THEN, THERE IS FREQUENCY VARIATIONS WITH RESPECT TO
22 TEMPERATURE. AND WE ARE GOING TO SEE THIS AGAIN AND AGAIN FOR
23 ALL OF THE OTHER PRODUCT, AS WELL. AND WE WILL QUICKLY GO
24 THROUGH THOSE.

10:50:56 25 **Q** AND SO HERE AGAIN, THE DOCUMENT SAYS "FIXED," BUT WHEN YOU

10:50:59 1 DIG IN, IT'S NOT FIXED?

2 **A** IT DESCRIBES THE VARIATIONS THAT THE -- THE VARIATIONS OF

3 FREQUENCY.

4 **Q** OKAY.

10:51:05 5 (DOCUMENT DISPLAYED)

6 **Q** AND IF WE COULD GO TO SG6841, COULD YOU PLEASE TELL US

7 WHAT THESE DOCUMENTS TELL US?

8 **A** YES. I'LL DO THIS PRETTY QUICKLY. THE SAME KIND OF

9 SIMILAR SETS OF CHARTS. THERE'S THE OSCILLATOR FREQUENCY WITH

10:51:20 10 THE MINIMUM, TYPICAL, MAXIMUM. AND ALSO IT DESCRIBES HOW THE

11 FREQUENCY VARIES WITH RESPECT TO VOLTAGE AND TEMPERATURE BY

12 5 PERCENT.

13 **Q** OKAY.

14 (DOCUMENT DISPLAYED)

10:51:31 15 **Q** AND IF WE COULD NEXT TURN TO THE SG3842.

16 **MS. ONDRICK:** AND, YOUR HONOR, I WOULD OFFER INTO

17 EVIDENCE DX 2202.

18 (DOCUMENT DISPLAYED)

19 **MR. POLLACK:** NO OBJECTION.

10:51:42 20 **THE COURT:** I'M SORRY, DX 22- --

21 **MS. ONDRICK:** -02.

22 **THE COURT:** OKAY. DX 2202 IS ADMITTED.

23 (TRIAL EXHIBIT 2202 RECEIVED IN EVIDENCE)

24 **BY MS. ONDRICK:**

10:52:23 25 **Q** AND CAN YOU TELL US WHAT YOUR OPINIONS ARE WITH REGARD TO

10:52:26 1 THE SG3842G.

2 **A** SURE. SO THE SG3842G, I THINK, IS PERHAPS THE LAST OF THE
3 COLLECTION OF REPRESENTATIVE PRODUCTS.

4 **Q** UH-HUH.

10:52:35 5 **A** AGAIN, WE SEE THE OSCILLATOR SECTION CHART WHERE THE
6 OSCILLATOR FREQUENCY IS SHOWN TO HAVE THIS MINIMUM, TYPICAL,
7 MAXIMUM VALUE.

8 AND THEN, IF WE LOOK FURTHER DOWN, THERE IS A FREQUENCY
9 CHANGE WITH VCC, IS ALSO THE INPUT VOLTAGE IN THIS CASE. AND
10:52:52 10 THE FREQUENCY CHANGE WITH TEMPERATURE.

11 AND THOSE, THERE'S, I GUESS, SOME EDITS MADE TO THIS
12 DATASHEET. I THINK THAT'S -- THE ORIGINAL DATASHEET IS LIKE
13 THAT.

14 **Q** THIS IS A VERY OLD PRODUCT THAT WASN'T MADE FOR A VERY
10:53:09 15 LONG TIME, SO THAT IS THE CURRENT DATASHEET FOR THE PRODUCT.

16 **A** THAT IS MY UNDERSTANDING.

17 **Q** SO, FOR THE RECORD, DR. WEI, SOME OF THE ITEMS THAT YOU
18 HAVE HIGHLIGHTED TODAY COME FROM DX 3107 FOR THE FAN103. AND
19 YOU HAD IDENTIFIED FIGURE 24, PAGE 1, AND PAGE -- APPEARING AT
10:53:30 20 FSG 11898.

21 AND YOU HAVE ALSO IDENTIFIED, FOR THE RECORD, INFORMATION
22 FOR THE FAN103 ALSO APPEARING AT FSGIV11892.

23 FOR THE FAN -- SG5841J, YOU HAVE IDENTIFIED DOCUMENTATION
24 FROM DX 4606, APPEARING AT PAGE 6, WHICH IS --

10:53:56 25 **A** FOR THAT PRODUCT, I JUST -- I THINK ONE COMMENT IS, IT'S

10:54:00 1 THE 5841 AND THEN /J IS ACTUALLY THAT DATASHEET. THERE IS A
2 SINGLE DATASHEET THAT COVERS BOTH THE 5841 AND THE 5841J. I
3 JUST WANTED TO MAKE THAT CLEAR.

4 Q THANK YOU. AND THAT WAS ACTUALLY AT PAGE 6 OF THE
10:54:15 5 DATASHEET WHICH COVERED BOTH PRODUCTS.

6 THE COURT: WHAT ARE YOU READING FROM?

7 MS. ONDRICK: JUST THE EXHIBITS THAT HE HAD --
8 (INDICATING)

9 THE COURT: ARE YOU JUST TRYING TO IDENTIFY AT THIS
10:54:23 10 TIME WHAT HE'S TALKED ABOUT UP THERE?

11 MS. ONDRICK: CORRECT.

12 THE COURT: OH. WELL, IT MAY BE BETTER TO DO IT WHEN
13 HE'S DOING IT.

14 MS. ONDRICK: I AGREE, YOUR HONOR. THAT'S WHY I'M
10:54:32 15 GOING BACK AND DOING IT RIGHT NOW. AND WE'LL DO IT GOING
16 FORWARD.

17 THE COURT: ALL RIGHT. YOU'RE ASKING THAT THE RECORD
18 REFLECT THAT HE HAS IDENTIFIED IN SOME SEQUENCE THE FOLLOWING,
19 WHAT, DATASHEETS?

10:54:44 20 MS. ONDRICK: YES. I CAN -- I'LL GO BACK REALLY
21 QUICK, YOUR HONOR.

22 (DOCUMENT DISPLAYED)

23 THE COURT: WELL, IF YOU WANTED TO STATE IT FOR THE
24 RECORD, IT LOOKED LIKE YOU WERE JUST TALKING TO HIM.

10:54:54 25 ALL RIGHT.

10:54:55 1 (DOCUMENTS DISPLAYED)

2 **MS. ONDRICK:** ALL RIGHT. AND THEN, JUST FOR THE
3 RECORD, DR. WEI WAS REFERRING TO THE DX 4681 AT PAGE 5, AND --
4 FOR THE SG6841. AND FOR THE SG3842G, IT WAS DX 2202 AT
10:55:13 5 PAGE 4.

6 **THE COURT:** OKAY.

7 **BY MS. ONDRICK:**

8 **Q** NOW, THAT'S A LOT OF PRELITIGATION EVIDENCE, ISN'T IT,
9 DR. WEI?

10:55:24 10 **A** YES.

11 **Q** AND SO, THERE'S PLENTY OF EVIDENCE, PRELITIGATION, TO SAY
12 THAT FIXED FREQUENCY DOESN'T EXIST IN FAIRCHILD PRODUCTS. IS
13 THAT RIGHT?

14 **A** WHAT WE'VE SEEN FROM ALL OF THE DATASHEETS -- AND THEY
10:55:37 15 WERE REFERRED TO AS THE "PRELITIGATION DATASHEETS," I THINK
16 WHEN WE SAW FROM DR. KELLEY'S SLIDE. SO, ALL OF THEM HAVE ALL
17 OF THESE TABLES.

18 AND ALL THESE TABLES DESCRIBE HOW -- AND WE HEARD THIS
19 FROM MR. W.H. HUANG, AS WELL -- HOW WHEN A CUSTOMER BUYS THESE
10:55:56 20 PRODUCTS OR THINKS ABOUT USING THEM, THEY UNDERSTAND THAT THE
21 FREQUENCY VARIES. IT VARIES WITH VOLTAGE. IT VARIES WITH
22 TEMPERATURE. AND, THERE'S ALSO OTHER TYPES OF VARIATIONS, AS
23 WELL.

24 **Q** AND IN REACHING YOUR OPINIONS, DID YOU APPLY THE COURT'S
10:56:11 25 CLAIM CONSTRUCTION OF "FIXED SWITCHING FREQUENCY"?

10:56:13 1 **A** YES. IF WE -- IF YOU RECALL THE COURT'S CLAIM
2 CONSTRUCTION FOR "FIXED SWITCHING FREQUENCY" IS A "NONVARYING
3 NUMBER OF SWITCHING CYCLES PER SECOND."

4 **Q** SO WHEN THE COURT SAID "NONVARYING," THAT MEANS NO
10:56:32 5 VARIATION. IS THAT RIGHT?

6 **MR. POLLACK:** OBJECTION, YOUR HONOR.

7 **MS. ONDRICK:** LET ME RESTATE THAT, THEN.

8 **BY MS. ONDRICK:**

9 **Q** "FIXED FREQUENCY," THE COURT SAID: "FIXED SWITCHING
10:56:42 10 FREQUENCY MEANS A NONVARYING NUMBER OF SWITCHING CYCLES PER
11 SECOND." CORRECT?

12 **A** PRECISELY.

13 **Q** AND, YOU'VE APPLIED THAT TO THE PRODUCTS IN THIS CASE.
14 CORRECT?

10:56:51 15 **A** THAT'S CORRECT.

16 **Q** NOW, LET'S TAKE A LOOK AT DR. KELLEY'S --
17 (DOCUMENT DISPLAYED)

18 **Q** -- OPINION IN THIS CASE. YOU WERE HERE IN COURT WHEN HE
19 TESTIFIED. IS THAT RIGHT?

10:57:04 20 **A** YES, I WAS.

21 **Q** AND, DID YOU HEAR HIS TESTIMONY WHERE HE WAS ASKED THE
22 FOLLOWING QUESTION:

23 "QUESTION: AND YOU SAID THAT YOUR

24 UNDERSTANDING WAS THAT THAT

10:57:13 25 'CYCLES-PER-SECOND' LANGUAGE REQUIRED

10:57:17 1 COUNTING CYCLES WITHIN A SECOND INTERVAL OF
2 TIME. RIGHT?
3 "ANSWER: YES."
4 DID YOU HEAR THAT?
10:57:30 5 **A** I DID.
6 **Q** AND DO YOU AGREE WITH THAT?
7 **A** I DO NOT AGREE WITH THAT.
8 **Q** WHY?
9 **A** WELL, DR. KELLEY, HERE, WHAT HE WAS SAYING WAS HIS -- I
10:57:39 10 GUESS HIS UNDERSTANDING OF WHAT THE COURT'S CLAIM CONSTRUCTION
11 MEANT WAS THAT YOU COUNT THE NUMBER OF CYCLES IN A ONE-SECOND
12 INTERVAL, AND THEN YOU HAVE TO KIND OF ALWAYS COUNT THE NUMBER
13 OF CYCLES FROM THIS SECOND TO NEXT SECOND, ET CETERA.
14 WHEREAS, IF YOU LOOK AT THE COURT'S CLAIM CONSTRUCTION, IT
10:58:00 15 SAYS "A NON-VARYING NUMBER OF SWITCHING CYCLES PER SECOND."
16 AND IT'S -- IT DOESN'T SAY "COUNTING WITHIN A SECOND." IT
17 SAYS "SWITCHING CYCLES PER SECOND."
18 (DOCUMENT DISPLAYED)
19 **Q** SO I THINK IT IS YOUR VIEW THAT DR. KELLEY'S MATH DOESN'T
10:58:19 20 ADD UP. CAN YOU TELL US WHAT YOU ARE SHOWING HERE?
21 **A** YEAH, SO, PERHAPS ONE WAY WE CAN TRY TO UNDERSTAND THIS
22 AND WHY I DON'T BELIEVE THE MATH ADDS UP, IS THIS IS A FIGURE
23 FROM THE '079 PATENT. IT IS FIGURE 5.
24 AND WHAT WE SEE HERE IS A -- KIND OF A GRAPHIC THAT SHOWS
10:58:40 25 WHAT I BELIEVE IS A -- THERE IS A FLAT REGION HERE

10:58:45 1 (INDICATING) AT 100 KILOHERTZ. AND SO THAT WOULD BE THAT
2 FIXED SWITCHING FREQUENCY.

3 AND THEN, THERE IS ANOTHER PORTION OF THE CURVE THAT GOES
4 DOWN FOR A RANGE OF WHAT ARE CALLED THE "CONTROL TERMINAL
10:59:02 5 CURRENT." SO FROM ABOUT, LET'S SAY, 5.3 TO 6. OKAY?

6 AND SO, THESE ARE THE TWO RANGES OF OPERATION THAT THE
7 '079 PATENT DESCRIBES. AND SO LET'S SAY, FOR SAKE OF
8 ARGUMENT, THAT THE CONTROL TERMINAL CURRENT HAPPENS TO BE
9 5 MILLIAMPS. AND THAT WOULD MEAN THAT THE DEVICE WOULD BE
10:59:25 10 OPERATING AT 100 KILOHERTZ.

11 AND SO LET'S IMAGINE THAT IT'S OPERATING AT 100 KILOHERTZ
12 FOR HALF A SECOND. AND THEN, BECAUSE THE LOAD CONDITION
13 CHANGES, THE CONTROL TERMINAL CURRENT ALSO CHANGES. AND SO
14 NOW THE DEVICE IS OPERATING, LET'S SAY, AT 50 KILOHERTZ. AND
10:59:44 15 LET'S SAY THAT IS HAPPENING FOR HALF -- THE REMAINING OTHER
16 HALF SECOND.

17 AND THEN, THE LOAD CURRENT CONDITIONS CHANGE AGAIN, SO
18 THAT THE DEVICE GOES BACK TO 100 KILOHERTZ FOR HALF A SECOND.
19 AND LET'S SAY IT'S JUST REPEATING THAT PROCESS BACK AND FORTH,
10:59:59 20 BACK AND FORTH.

21 AND YOU CAN IMAGINE THE REASON FOR SOMETHING LIKE THIS IS
22 YOU ARE PLAYING A GAME ON YOUR LAPTOP, RIGHT? AND IT IS GOING
23 KIND OF THROUGH THESE -- THERE ARE PERIODS WHERE YOU ARE
24 SHOOTING A LOT OF THINGS, AND THEN THINGS ARE CHANGING. AND
11:00:15 25 SO WE ARE GOING THROUGH THIS KIND OF PERIODIC ACTIVITY OF

11:00:19 1 HIGHER ACTIVITY AND LOWER ACTIVITY.

2 AND SO, BUT ACCORDING TO DR. KELLEY'S CALCULATIONS, IF I'M
3 COUNTING THOSE CYCLES OVER THE ENTIRE ONE SECOND, THEN I WOULD
4 COUNT 75,000 CYCLES WITHIN THAT ONE SECOND.

11:00:36 5 BUT IF I LOOK ON THIS CHART, AND I LOOK AT, WELL, IF A
6 DEVICE IS OPERATING AT 75 KILOHERTZ, THAT WOULD PUT ME RIGHT
7 AROUND HERE (INDICATING), FOR A CONTROL TERMINAL CURRENT OF
8 MAYBE 5.4 MILLIAMPS.

9 BUT IF YOU THINK ABOUT THAT, THAT'S NOT CONSISTENT WITH
11:00:54 10 WHAT I JUST DESCRIBED AS THE SITUATION TO BE. THE DEVICE WAS
11 OPERATING AT 100 KILOHERTZ FOR HALF A SECOND. AND THEN, THE
12 DEVICE WAS OPERATING AT 50 KILOHERTZ FOR HALF A SECOND, AND
13 GOING BACK AND FORTH.

14 SO, WE ARE, YOU KNOW, COUNTING WITHIN ONE SECOND, THAT'S
11:01:11 15 NOT THE WAY YOU WOULD UNDERSTAND THIS DEVICE TO OPERATE.

16 **Q** WHAT DOES THE PATENT TEACH US ABOUT THE MATH?

17 **A** WELL, IF YOU LOOK IN THE PATENT, THERE'S A DESCRIPTION OF
18 HOW YOU COMPUTE THIS FREQUENCY, AND HOW IT IS RELATED TO A
19 PERIOD. SO WHAT WE SEE HERE IS THE LOW-FREQUENCY PERIOD --
11:01:32 20 JUST ONE OF THE INSTANCES -- OF 41 MICROSECONDS. AND SO THAT
21 MICRO IS ONE MILLIONTH OF A SECOND. SO 41/MILLIONTH OF A
22 SECOND IS THE PERIOD OF TIME THAT IS CORRESPONDING TO THE
23 CYCLE THAT WE HAVE SEEN BEFORE.

24 AND IF YOU TAKE -- IF YOU COMPUTE THE 1 OVER 41
11:01:52 25 MICROSECONDS, THAT IS THE FREQUENCY. AND THAT FREQUENCY AS

11:01:57 1 SHOWN BY THE PATENT IS 24.4 KILOHERTZ.

2 Q THANK YOU, DR. WEI.

3 NOW, WE HAVE COVERED SOME OF THE PRELITIGATION
4 DOCUMENTATION. NOW, I WOULD LIKE TO TALK ABOUT THE TESTING,
11:02:11 5 IF WE COULD.

6 A OKAY.

7 (DOCUMENT DISPLAYED)

8 Q AND YOU HAD FOUR PRODUCTS TESTED IN THIS CASE. IS THAT
9 RIGHT?

11:02:18 10 A THAT'S RIGHT. SO WHAT WE ARE LOOKING AT HERE ARE THE
11 PICTURES OF EACH OF THE PRODUCTS THAT WERE TESTED. SO THE
12 FAN103, THE SG6841, THE SG5841, AND THE SG5841J.

13 AND, WHAT YOU SEE IN THE MIDDLE, THE SG3842G, THAT WAS
14 SUCH AN OLD PRODUCT WE COULDN'T FIND THAT CHIP AND BE ABLE TO
11:02:43 15 TEST IT. SO THERE'S NO TEST RESULTS FOR THAT PARTICULAR
16 PRODUCT.

17 (DOCUMENT DISPLAYED)

18 Q AND WE ARE JUST SHOWING HERE THE TEST SETUP?

19 A IT IS JUST THE TEST SETUP.

11:02:52 20 (DOCUMENT DISPLAYED)

21 Q THANK YOU.

22 OKAY. CAN YOU SHOW US -- WE HAVE GOT ON THE SCREEN
23 DX 5709 AND DX 4495. THIS IS A FREQUENCY-VERSUS-LOAD WAVEFORM
24 FOR THE SG6841.

11:03:08 25 CAN YOU JUST TELL US WHAT'S BEING SHOWN HERE, AND DESCRIBE

11:03:11 1 THE DATA?

2 **A** SURE. SO, WHAT'S BEING SHOWN HERE, AGAIN, THIS IS A
3 SCREENSHOT THAT HAS THOSE VARIOUS WAVEFORMS.

4 AND THE TWO WAVEFORMS, I THINK, THAT ARE OF PARTICULAR
11:03:23 5 IMPORTANCE HERE IS ONE OF THEM IS THE RED WAVEFORM THAT IS THE
6 SWITCHING OF THE POWER SWITCH. OKAY?

7 AND SO IF YOU MEASURED THE AMOUNT OF TIME BETWEEN, LET'S
8 SAY, THIS RISING EDGE OF THIS PULSE TO THE NEXT RISING EDGE OF
9 THE PULSE, THAT IS A CYCLE. OKAY?

11:03:44 10 AND IF YOU TAKE ONE OVER THAT, THAT GIVES YOU THE
11 FREQUENCY. AND, THAT'S FOR THE SWITCHING OF THE POWER SWITCH.

12 AND THEN, THE YELLOW LINE HERE, THAT, IN THIS CASE, IS THE
13 FEEDBACK VOLTAGE. OKAY? AND THAT IS ANOTHER IMPORTANT ASPECT
14 OF THE '908 PATENT.

11:04:03 15 AND WHAT WE CAN SEE HERE IS THAT THE OSCILLOSCOPE ALSO
16 PROVIDES MEASUREMENTS (INDICATING). RIGHT? IT LOOKS AT ALL
17 THIS, AND IT IS MUCH BETTER AT LOOKING AT ALL THESE EDGES AND
18 THEN COMPUTING: OKAY. HERE IS WHAT THE FREQUENCY IS. AND
19 HERE IS WHAT THE AVERAGE VOLTAGE OF THE FEEDBACK VOLTAGE IS.

11:04:24 20 AND SO IF WE LOOK HERE THERE IS A MEAN VOLTAGE AND A MEAN
21 FREQUENCY THAT CORRESPOND TO THE AVERAGE FREQUENCY AND THE
22 AVERAGE VOLTAGE OF THESE TWO WAVEFORMS.

23 AND THAT'S WHAT'S BEING PROVIDED BY THE OSCILLOSCOPE.

24 AND THIS IS THE DATA THAT I RELIED ON BY LOOKING AT THESE
11:04:42 25 NUMBERS. AND WHAT I CAN DO IS I CAN FURTHER JUST TAKE THESE

11:04:45 1 NUMBERS, THE DATA FROM THE SCREENSHOTS, AND THEN PUT IT INTO A
2 PROGRAM LIKE EXCEL.

3 ACTUALLY, I LIKE TO USE A DIFFERENT PROGRAM CALLED
4 "MATLAB," JUST BECAUSE I USED IT A LOT IN COLLEGE. I'M KIND
11:05:00 5 OF GEEKY.

6 BUT, ANYWAY, SO I PLUG IN THESE NUMBERS AND YOU CAN CREATE
7 A PLOT OF WHAT THOSE NUMBERS ARE.

8 **Q** SO, BASICALLY, LET'S TALK ABOUT WHAT YOU ARE SHOWING RIGHT
9 HERE. YOU HAVE RECEIVED A LOT OF DIFFERENT OSCILLOSCOPE
11:05:13 10 SCREENSHOTS. IS THAT RIGHT?

11 **A** I DID. SO, LUCKILY, THEY CAME TOGETHER WITH FOUR
12 SCREENSHOTS IN ONE PAGE, WHICH MADE IT A LOT EASIER TO LOOK
13 AT. AND ALSO, THEY CAME WITH SOME LABELS, SO I KNOW WHAT THE
14 CONDITION FOR THIS PARTICULAR SCREENSHOT WAS.

11:05:30 15 SO, THERE'S THE LOAD CONDITION OF ZERO MILLIAMPS,
16 15 MILLIAMPS, 30 MILLIAMPS, 45 MILLIAMPS.

17 AND SO, I KNOW WHAT EACH OF THOSE PLOTS CORRESPOND TO IN
18 TERMS OF THE TEST SETUP.

19 (DOCUMENT DISPLAYED)

11:05:47 20 **A** AND THEN, WHAT WE ARE SHOWING HERE -- THERE IS A LOT THAT
21 WE ARE NOT SHOWING HERE -- BUT IT GOES ALL AWAY UP TO 4.5 AND
22 5 AMPS. SO THAT COVERS A LOT OF DIFFERENT DATA POINTS.

23 IF YOU REMEMBER YESTERDAY -- I THINK IT WAS MR. CHUEH WHO
24 SHOWED THAT THERE WERE ALL THESE DATA POINTS THAT HE
11:06:05 25 COLLECTED.

11:06:05 1 SO HE HAD TO SIT IN FRONT OF THAT MACHINE FOR QUITE A BIT
2 OF TIME AND CAPTURE ALL THESE DATA POINTS.

3 Q OKAY. SO WHY DON'T WE GO AHEAD AND TAKE A LOOK --
4 (DOCUMENT DISPLAYED)

11:06:20 5 MR. POLLACK: OBJECTION, YOUR HONOR.

6 BY MS. ONDRICK:

7 Q -- AT SOME OF THESE DATA POINTS. AND, DR. WEI, CAN YOU
8 PUT THEM INTO A GRAPH AND ACTUALLY PLOT THE TEST RESULTS?

9 A SO, AS I HAD DESCRIBED, WHAT I CAN DO IS USE A PROGRAM
11:06:35 10 LIKE EXCEL. I USED A PROGRAM CALLED "MATLAB."

11 AND WHAT YOU DO IS YOU CREATE A COLUMN OF NUMBERS THAT YOU
12 PICK UP FROM THE SCREENSHOTS THAT CORRESPOND TO FEEDBACK
13 VOLTAGE. WRITE ALL THOSE DOWN. AND THEN, I CAN ALSO GRAB
14 THE -- I HAVE THE FREQUENCY NUMBERS FROM THE SCREENSHOTS. I'M
11:06:56 15 LOOKING THROUGH EACH AND EVERY PAGE OF THE SCREENSHOTS, WRITE
16 ALL THOSE DOWN IN A SECOND COLUMN.

17 AND THEN, I USE A TOOL LIKE MATLAB TO SAY: "OKAY. NOW,
18 PLOT ME THE FREQUENCY NUMBERS VERSUS THE FEEDBACK NUMBERS."

19 MR. POLLACK: YOUR HONOR, OBJECTION. I MOVE TO
11:07:11 20 STRIKE. RULE 26, BEYOND THE SCOPE.

21 THE COURT: THE GRAPH ITSELF MAY BE BEYOND THE SCOPE
22 UNDER RULE 26.

23 YOU WERE ENDEAVORING TO LAY THE FOUNDATION FOR DX 44 --
24 DDX 442?

11:07:34 25 MS. ONDRICK: SURE, YOUR HONOR. YES.

11:07:36 1 **THE COURT:** WAIT. NO, I'M ASKING.

2 **MS. ONDRICK:** YES, YOUR HONOR.

3 **THE COURT:** OKAY. WELL, I DO HAVE SOME CONCERNS
4 ABOUT THE TIMING OF ITS PRODUCTION, WHICH DOESN'T NECESSARILY
11:07:51 5 GO ONE WAY OR THE OTHER TO ITS VALIDITY, BUT WAS NOT AVAILABLE
6 EARLIER.

7 SO AT LEAST FOR NOW I'M GOING TO SUSTAIN THE OBJECTION.
8 WE MAY HAVE A BREAK ALONG THE WAY IF THERE'S ANYTHING ELSE
9 ANYONE WANTS TO ADD TO THIS.

11:08:08 10 **MS. ONDRICK:** YOUR HONOR, CAN I REQUEST A SIDEBAR,
11 BRIEFLY?

12 **THE COURT:** NO. WE CAN EITHER SEND THE JURY OUT, OR
13 WE CAN KEEP GOING.

14 **MS. ONDRICK:** I WOULD REQUEST TO SEND THE JURY OUT,
11:08:19 15 PLEASE.

16 **THE COURT:** WELL, ALL RIGHT. LADIES AND GENTLEMEN,
17 PLEASE TAKE A TEN-MINUTE BREAK.

18 (JURY EXCUSED)

19 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
11:08:42 20 PRESENCE OF THE JURY)

21 **THE COURT:** ALL RIGHT. THE JURORS HAVE STEPPED OUT.

22 THE CONCERN HERE IS WHAT WAS REQUIRED TO BE DISCLOSED
23 UNDER RULE 26. IF IT INCLUDED ANY DISPLAYS OF THIS NATURE,
24 THAT WOULD BE ONE THING. I THINK THAT YOU AGREED TO EXCHANGE
11:08:59 25 DISPLAYS, HOWEVER, AT A LATER TIME.

11:09:01 1 HOWEVER, THIS IS NOT JUST A DEMONSTRATIVE. I THINK IT IS
2 SOMETHING, PERHAPS, BEYOND THAT. THAT IS THE QUESTION.

3 HE CREATED DOCUMENTS OF THIS SORT FOR OTHER PURPOSES? OR
4 THIS IS THE ONLY ONE?

11:09:15 5 **MR. POLLACK:** NO, YOUR HONOR. HE DID NOT CREATE ANY
6 OF THE GRAPHS IN HIS REPORT.

7 **THE COURT:** WELL, EXCEL DID, OR WHATEVER HIS FAVORITE
8 PROGRAM IS.

9 **MR. POLLACK:** NO, NO, NOT EXCEL. HE DID NOT
11:09:24 10 PERSONALLY CREATE ANY OF THE PLOTS IN HIS REPORT. HE RECEIVED
11 THEM AS PLOTS. HE DIDN'T CREATE THEM.

12 **THE COURT:** FROM WHOM?

13 **MS. ONDRICK:** MR. CHUEH. MR. CHUEH PLOTTED THE SAME
14 DATA.

11:09:36 15 **THE COURT:** OH, WELL, MR. CHUEH HASN'T TESTIFIED TO
16 THIS.

17 **MR. POLLACK:** (SHAKES HEAD)

18 **THE COURT:** OKAY. I UNDERSTOOD FROM THIS WITNESS'S
19 TESTIMONY, I WAS LED TO BELIEVE THAT HE TOOK ALL THOSE
11:09:44 20 FIGURES, AND PUT THEM INTO HIS FAVORITE PROGRAM.

21 **MS. ONDRICK:** HE DID. THERE'S TWO ISSUES, IF I MAY
22 SET IT UP.

23 **THE COURT:** OKAY.

24 **MS. ONDRICK:** SO, DR. WEI'S REPORT CONTAINS PLOTS
11:09:58 25 THAT WERE PREPARED IN EXCEL, AND THEY APPEARED IN DR. WEI'S --

11:10:04 1 AN EXHIBIT TO DR. WEI'S REPORT.

2 **THE COURT:** YES. AND THOSE WERE DONE BY MR. CHUEH.

3 **MS. ONDRICK:** MR. CHUEH.

4 **THE COURT:** OKAY. HE HASN'T TESTIFIED TO THEM.

11:10:15 5 OKAY. THEN, YOU HAVE THIS PARTICULAR DOCUMENT. WAS IT
6 CREATED IN THE SAME WAY?

7 (OFF-THE-RECORD DISCUSSION BETWEEN COUNSEL)

8 **THE COURT:** I'M JUST TRYING TO FIND OUT.

9 **MS. ONDRICK:** SO THESE WERE CREATED IN THE SAME WAY,
11:10:25 10 YES. THEY WERE PUT IN A PROGRAM THAT HAS -- ALLOWS YOU TO
11 CREATE A PLOT BY ENTERING DATA.

12 **THE COURT:** OKAY.

13 **MS. ONDRICK:** EXCEL AND MATLAB ARE NO DIFFERENT IN
14 THAT FUNCTIONALITY, WHATSOEVER.

11:10:39 15 **THE COURT:** YEAH. EITHER WAY, HE DIDN'T DO IT. ALL
16 RIGHT? SO, I DON'T KNOW THAT HE IS ABLE TO TESTIFY BASED ON
17 THIS PARTICULAR ITEM --

18 (OFF-THE-RECORD DISCUSSION BETWEEN COUNSEL)

19 **THE COURT:** -- BECAUSE IT'S NOT IN EVIDENCE. NOR WAS
11:10:51 20 THERE ANY FOUNDATION LAID FOR IT.

21 WHY ARE YOU POPPING UP, MR. WARREN? DID YOU WANT TO TALK
22 TO MR. POLLACK?

23 **MR. WARREN:** (SHAKES HEAD)

24 **THE COURT:** NO? OKAY. ALL RIGHT.

11:11:00 25 **MS. ONDRICK:** THE PLOTS THAT MR. CHUEH PREPARED WERE

11:11:07 1 DONE AT DR. WEI'S INSTRUCTION, AND HE REQUESTED THEM.

2 **THE COURT:** HE REQUESTED THAT THIS PARTICULAR 442 DDX
3 BE CREATED?

4 **MS. ONDRICK:** NO. HE REQUESTED THAT A DIFFERENT PLOT
11:11:18 5 BE CREATED. AND I CAN --

6 **THE COURT:** OKAY. ALL RIGHT.

7 **MS. ONDRICK:** WELL, THERE ARE TWO POINTS --

8 **THE COURT:** OKAY.

9 **MS. ONDRICK:** -- I THINK WE NEED TO TALK ABOUT. THE
11:11:26 10 FIRST --

11 **THE COURT:** HOW ABOUT THE FACT THAT YOU SHOWED ALL
12 THE OTHERS TO THE OPPOSING PARTY IN DR. WEI'S REPORT AND NOT
13 THIS ONE?

14 OKAY. THAT'S WHAT I UNDERSTAND THE MAIN OBJECTION TO BE
11:11:37 15 HERE. IT'S A DISCOVERY OBJECTION.

16 **MS. ONDRICK:** CORRECT.

17 **THE COURT:** HE HAD THE OTHERS. HE DOESN'T HAVE THIS.
18 AND WHEN DID YOU GET THIS, MR. POLLACK?

19 **MR. POLLACK:** 3:00 A.M. THIS MORNING.

11:11:49 20 **THE COURT:** PARDON?

21 **MR. POLLACK:** I THINK IT WAS 3:00 A.M. THIS MORNING.

22 **THE COURT:** OKAY. YOU GOT IT THIS MORNING.

23 **MS. ONDRICK:** NO. HE'S HAD THESE SINCE THE DATE OF
24 DISCLOSURE WHEN THEY WERE DUE.

11:11:59 25 THAT IS INCORRECT.

11:12:00 1 **THE COURT:** DON'T TALK TO MR. POLLACK. YOU CAN TALK
2 TO THE COURT, BUT YOU ARE NOT TO ENGAGE IN CONVERSATION WITH
3 OPPOSING COUNSEL.

4 **MR. POLLACK:** THE PARTICULAR VERSION THAT I WAS
11:12:07 5 OBJECTING TO WAS THE VERSION I RECEIVED THIS MORNING, WHERE
6 THEY CHANGED SOME OF THE REFERENCES THAT ARE IN THE SLIDE.

7 THEY PROVIDED AN ORIGINAL VERSION A FEW DAYS AGO, WHICH WE
8 ALSO OBJECTED TO.

9 **THE COURT:** OKAY. AND THIS ONE IS SOMEWHAT
11:12:22 10 DIFFERENT?

11 **MS. ONDRICK:** WE JUST ADDED THE CITES FOR THE
12 EVIDENCE THAT WAS ADMITTED INTO THE RECORD YESTERDAY,
13 YOUR HONOR.

14 **THE COURT:** ALL RIGHT. OKAY. ALL RIGHT. IF HE
11:12:33 15 WANTED TO SHOW WHAT WAS IN HIS REPORT, HAD YOU PLANNED TO
16 OBJECT TO THOSE?

17 **MR. POLLACK:** NO. WELL, WE DIDN'T HAVE THEM, SO WE
18 DIDN'T OBJECT TO THEM.

19 **THE COURT:** NO, NOT THESE.

11:12:44 20 **MR. POLLACK:** I KNOW.

21 **THE COURT:** THE ONES YOU DID HAVE, DIDN'T YOU HAVE
22 THEM IN THE REPORT?

23 **MS. ONDRICK:** (NODS HEAD)

24 **MR. POLLACK:** WELL, WE HAVE THE REPORTS, YES.

11:12:51 25 **THE COURT:** AND AREN'T THERE GRAPHS OF SOME SORT

11:12:54 1 SIMILAR TO THIS, BUT NOT THIS ONE?

2 MR. POLLACK: THERE ARE SOME GRAPHS, YES.

3 THE COURT: ALL RIGHT. IF HE WANTED TO USE THOSE,
4 WOULD YOU BE OBJECTING?

11:13:00 5 MR. POLLACK: NO, YOUR HONOR.

6 THE COURT: ALL RIGHT. SO IT'S PURELY A QUESTION OF
7 DISCOVERY. RIGHT?

8 MR. POLLACK: IT IS, YOUR HONOR.

9 THE COURT: OKAY. HAD YOU QUESTIONED HIM AT HIS
11:13:10 10 DEPOSITION ABOUT THE OTHER GRAPHS?

11 MR. POLLACK: YES, I HAD.

12 THE COURT: OKAY. YOU HAVE NOT HAD AN OPPORTUNITY TO
13 QUESTION HIM ABOUT THIS ONE (INDICATING).

14 MR. POLLACK: CORRECT, YOUR HONOR.

11:13:19 15 THE COURT: ALL RIGHT. OKAY. I AM INCLINED TO
16 SUSTAIN THE OBJECTION UNDER RULE 26.

17 MS. ONDRICK: YOUR HONOR, THE DATA HAS BEEN PROVIDED.
18 IT'S THE SAME DATA THAT THEY QUESTIONED HIM ON AT THE
19 DEPOSITION. THE FACT THAT IT WASN'T PUT INTO A PRETTY GRAPH
11:13:37 20 FOR THEM IS NOT A RULE 26 VIOLATION.

21 THE COURT: WELL, IT MIGHT BE, DEPENDING ON WHAT THIS
22 WITNESS SAYS. IT DOESN'T SOUND LIKE IT IS SOMEBODY JUST
23 STICKING DOTS ON A PAGE; THAT THERE HAS TO BE SOME KIND OF A
24 CALCULATION. I'M NOT SURE WHAT IT IS.

11:13:52 25 (OFF-THE-RECORD DISCUSSION BETWEEN COUNSEL)

11:13:53 1 **THE COURT:** WHAT WAS THE NATURE OF THE EXAMINATION
2 THAT OCCURRED AT THE DEPOSITION REGARDING THE OTHER GRAPHS?

3 **MR. POLLACK:** YOUR HONOR, THE GRAPHS THAT WERE
4 PROVIDED IN THE REPORT PLOT TWO DIFFERENT SETS OF DATA:
11:14:05 5 FREQUENCY VERSUS LOAD, FEEDBACK VOLTAGE VERSUS LOAD.

6 I ASKED DR. WEI: "WHY DON'T YOU HAVE ONE THAT'S FEEDBACK
7 VERSUS FREQUENCY?"

8 HE SAID: "I DIDN'T ASK FOR THAT. THIS IS WHAT I ASKED
9 FOR. THIS IS WHAT I GOT."

11:14:19 10 AND I SAID: "DID YOU GET THE UNDERLYING DATA FROM WHICH
11 THESE WERE GENERATED?"

12 AND HE SAID: "NO, I DIDN'T ASK FOR THAT. I JUST HAD THE
13 EXCEL."

14 THAT'S WHAT HIS TESTIMONY WAS IN HIS DEPOSITION. AND I
11:14:32 15 CAN GIVE YOU THE TESTIMONY, IF YOU WOULD LIKE.

16 **MS. ONDRICK:** I THINK WE SHOULD HAND THE TESTIMONY
17 UP, BECAUSE THAT IS NOT THE FULL PICTURE.

18 **THE COURT:** WELL, WHAT DO YOU UNDERSTAND THE FULL
19 PICTURE TO BE?

11:14:45 20 **MS. ONDRICK:** TWOFOLD. THAT THE REPORTS DO CONTAIN A
21 PLOT LIKE THIS ONE (INDICATING). IF YOU CAN SEE, THIS IS
22 FREQUENCY VERSUS LOAD.

23 THIS -- THIS IS THE TYPE OF PLOT -- THIS IS THE TYPE OF
24 PLOT THAT'S IN THE REPORT.

11:14:55 25 SO, DR. WEI WAS QUESTIONED AT HIS DEPOSITION ABOUT PLOTS

11:15:00 1 LIKE THIS (INDICATING). AND THEN ASKED, "WELL, WHY DIDN'T YOU
2 PREPARE A PLOT OF FREQUENCY VERSUS LOAD?"

3 AND HE ESSENTIALLY SAID: "I DIDN'T NEED TO. I CAN
4 CORRELATE -- IF I KNOW THE LOAD, I KNOW THE FEEDBACK, I CAN
11:15:13 5 CORRELATE THE TWO, AND I KNOW THE RESULTS. AND I DIDN'T NEED
6 IT."

7 THAT'S WHAT HE WAS SAYING. AND HE'D SAID THAT HE DID
8 CHECK. YOU KNOW, WHEN YOU LOOK AT THE PLOTS THAT WERE IN
9 THERE, HE LOOKED AT THE RAW DATA AND DETERMINED THAT THE PLOTS
11:15:24 10 WERE ACCURATE.

11 SO IT'S -- AND HE FURTHER STATED THAT IN FORMING HIS
12 OPINIONS IN THIS CASE, HE RELIED ON THE RAW UNDERLYING DATA.
13 AND THESE OPINIONS ALL DO GO TO WHETHER OR NOT THERE'S A FIXED
14 SWITCHING FREQUENCY FOR A RANGE OF FEEDBACK VALUES.

11:15:41 15 TO SAY THIS IS A NEW OPINION, I DON'T UNDERSTAND THAT.

16 **THE COURT:** OKAY. WELL, I DON'T THINK THE ARGUMENT
17 IS IT'S NEW OPINION. IT'S A NEW REPRESENTATION OF SOMETHING
18 THAT MAY OR MAY NOT BE ACCURATE, I GATHER. AND HASN'T --
19 HASN'T BEEN EXPLORED. BUT WAS THAT ESSENTIALLY THE EXTENT OF
11:16:05 20 THE INQUIRY WITH RESPECT TO THE OTHER GRAPHS?

21 IN OTHER WORDS, THAT THEY REFLECTED UNDERLYING DATA, IN
22 SOME FASHION? AND HE ASKED THAT THEY BE CREATED TO SHOW IT
23 GRAPHICALLY?

24 **MS. ONDRICK:** YES. IF I RECALL THE TESTIMONY -- I
11:16:25 25 DON'T HAVE IT IN FRONT OF ME. BUT HE SAID: "I ASKED FOR" --

11:16:28 1 I BELIEVE IT WAS NUMBERS 5 AND 6 FROM HIS TEST INSTRUCTIONS.

2 AND HE SAID: "LOOK. THIS IS WHAT I ASKED FOR. HERE'S
3 WHAT THEY GAVE ME. I DIDN'T NEED TO DO A FREQUENCY VERSUS
4 KILOHERTZ" -- "A FREQUENCY VERSUS FEEDBACK TEST. THIS IS
11:16:43 5 REPRESENTATIVE OF THE SAME THING. I CAN CORRELATE THE TWO.
6 MY OPINIONS ARE BASED ON THAT."

7 **THE COURT:** YEAH, I GOT THAT. YEAH, I HEARD THAT.
8 DR. WEI, WHAT IS THIS EXHIBIT 442? I'LL JUST SHOW IT TO
9 YOU, SIR.

11:16:54 10 **THE WITNESS:** OKAY.
11 (WITNESS EXAMINES DOCUMENT)

12 **THE COURT:** WHAT IS IT?

13 **THE WITNESS:** SO, YOUR HONOR, WHAT'S SHOWN HERE IS
14 THE OUTPUT OF A GRAPHING TOOL WHERE YOU ENTER IN NUMBERS FOR
11:17:05 15 THE X AXIS AND YOU ENTER IN NUMBERS FOR THE Y AXIS, AND THEN
16 IT JUST PUTS THESE DOTS ON, YOU KNOW, ON THE CHART
17 (INDICATING).

18 **THE COURT:** WHY IS IT ANY BETTER THAN DOING IT BY
19 HAND?

11:17:21 20 **THE WITNESS:** OH, IT'S MUCH MORE -- IT'S MUCH FASTER
21 THIS WAY.

22 I MEAN, IF I HAVE TO GET -- DRAW, TO GET GRAPH PAPER AND
23 DO IT BY HAND, BECAUSE THERE IS NOT JUST ONE PLOT, BUT A
24 NUMBER OF PLOTS, IT IS JUST MUCH EASIER TO DO IT USING A
11:17:35 25 COMPUTER THAN TO DO IT BY HAND.

11:17:38 1 **THE COURT:** AND WHAT DOES THIS PARTICULAR EXHIBIT
2 DEMONSTRATE, THAT YOU COULD NOT -- WELL, FIRST OF ALL, IF YOU
3 WERE GOING TO DESCRIBE IT VERBALLY, WHATEVER THE RESULTS ARE,
4 WHAT WOULD YOU BE SAYING?

11:17:49 5 **THE WITNESS:** IN TERMS -- SO, WHAT I WOULD BE SAYING
6 IS IF YOU LOOK AT THIS CHART --

7 **THE COURT:** LET'S SAY YOU DIDN'T HAVE THE CHART.

8 **THE WITNESS:** OH, OKAY.

9 **THE COURT:** AND YOU JUST WANTED TO DESCRIBE THE
11:18:00 10 RESULT. WHAT WOULD YOU SAY?

11 **THE WITNESS:** WHAT I WOULD SAY IS IF YOU LOOKED AT
12 ALL THE DATA ON ALL OF THE INDIVIDUAL SCREENSHOTS, AND YOU
13 STEP THROUGH THEM ONE-BY-ONE AND YOU WERE TO LOOK AT THE
14 FEEDBACK VALUE, AND YOU WERE TO LOOK AT THE FREQUENCY FOR ONE
11:18:15 15 SET OF -- ONE SCREENSHOT, AND YOU LOOK AT THE NEXT ONE, AND
16 THEN YOU LOOKED AT THE NEXT ONE, AND THEN YOU LOOKED AT THE
17 NEXT ONE, THAT THE FREQUENCY VARIES. IT'S GOT A MINIMUM
18 VALUE. IT'S GOT A MAXIMUM VALUE. IT'S GOT AN AVERAGE VALUE.

19 AND THAT THEREFORE, IT IS MY OPINION THAT THE FREQUENCY
11:18:35 20 VARIES.

21 **THE COURT:** OKAY. AND THIS WOULD -- EACH SCREENSHOT
22 IS REPRESENTING A DIFFERENT POINT IN TIME WITH THE SAME INPUT.
23 IS THAT THE IDEA?

24 **THE WITNESS:** IT'S ACTUALLY REPRESENTING A -- THE
11:18:47 25 DATA POINTS THAT'S SHOWN IN THE GRAPH --

11:18:50 1 **THE COURT:** NO, FORGET THE GRAPH.

2 **THE WITNESS:** IT'S SHOWING THE DATA FOR DIFFERENT
3 LOAD --

4 **THE COURT:** THIS ISN'T A SCREENSHOT. THIS IS
11:18:58 5 SOMETHING ELSE.

6 **THE WITNESS:** THIS IS A GRAPHICAL REPRESENTATION.

7 **THE COURT:** RIGHT. DON'T LOOK AT THAT WHEN WE ARE
8 TALKING ABOUT THE SCREENSHOTS FOR A MINUTE.

9 **THE WITNESS:** OKAY.

11:19:05 10 **THE COURT:** THE SCREENSHOTS VARY. IN OTHER WORDS,
11 SOMEBODY'S TAKING A SHOT OF WHAT'S SHOWN ON THE SCREEN AT A
12 PARTICULAR POINT IN TIME.

13 **THE WITNESS:** RIGHT.

14 **THE COURT:** RIGHT?

11:19:14 15 **THE WITNESS:** RIGHT.

16 **THE COURT:** AND THE SAME CONDITIONS ARGUABLY PERTAIN.
17 AND YET, THERE'S SOME VARIATION.

18 **THE WITNESS:** THE SCREENSHOT, SO --

19 **THE COURT:** FOR THE SAME INPUT OF SOME SORT.

11:19:27 20 **THE WITNESS:** SO EACH SCREENSHOT HAS A PARTICULAR
21 INPUT SETTING.

22 **THE COURT:** RIGHT.

23 **THE WITNESS:** SO, FOR EXAMPLE, A LOAD CURRENT. AND
24 THEN, THE NEXT SCREENSHOT HAS A DIFFERENT LOAD CURRENT

11:19:39 25 SETTING.

11:19:39 1 **THE COURT:** OKAY. SO THEY ARE VARYING WHEN YOU
2 CHANGE THE INPUT.

3 **THE WITNESS:** RIGHT.

4 **THE COURT:** IS THAT RIGHT?

11:19:45 5 **THE WITNESS:** RIGHT.

6 **THE COURT:** OKAY. AND, THIS PARTICULAR GRAPH HAS
7 TAKEN THE DIFFERENT TIMES -- WELL, THE DIFFERENT SCREENSHOTS,
8 AND PLOTTED THE RESULTS?

9 **THE WITNESS:** PRECISELY.

11:19:58 10 **THE COURT:** OKAY. AND ARE THERE -- ARE THERE LARGE
11 NUMBERS OF DOTS THAT SOMEBODY WOULD HAVE TO PUT ON BY HAND TO
12 CREATE THIS?

13 **THE WITNESS:** YES.

14 **THE COURT:** IS THAT THE DIFFERENTIAL?

11:20:12 15 **THE WITNESS:** YES.

16 **THE COURT:** WHAT ARE WE TALKING ABOUT IN TERMS OF
17 MAGNITUDE HERE?

18 **THE WITNESS:** SO WHAT I DID IS I LOOKED THROUGH EACH
19 OF THE SCREENSHOTS --

11:20:18 20 **THE COURT:** NO. JUST HOW MANY DOTS WOULD YOU HAVE TO
21 DO IF YOU HAD TO DO IT BY HAND?

22 **THE WITNESS:** LET'S SEE. THERE'S FIVE CHARTS, SO --

23 **THE COURT:** JUST TALKING --

24 **THE WITNESS:** MAYBE A HUNDRED.

11:20:27 25 **THE COURT:** OKAY, A HUNDRED. THAT'S NOT TOO BAD, BUT

11:20:29 1 A HUNDRED.

2 THE WITNESS: RIGHT.

3 THE COURT: OKAY. BUSY PROFESSOR, OKAY. DON'T HAVE
4 TIME TO MAKE DOTS.

11:20:36 5 ALL RIGHT. NOW, SO THAT'S WHAT THIS IS?

6 THE WITNESS: YES.

7 THE COURT: IN OTHER WORDS, A COMPUTER HAS DONE WHAT
8 YOU COULD DO BY HAND, IF SOMEBODY TOOK THE TIME -- YOU, IN
9 PARTICULAR -- TO GO DOWN AND PUT IT ON A PIECE OF PAPER.

11:20:49 10 THE WITNESS: CORRECT.

11 THE COURT: ALL RIGHT. AND THE DIFFERENT COLORS
12 REPRESENT WHAT, THEN, ON THAT PARTICULAR EXHIBIT?

13 THE WITNESS: THE DIFFERENT COLORS ARE JUST TO
14 REPRESENT THE DIFFERENT SETS OF DATA THAT WERE FOUND ON A
11:21:01 15 SINGLE SCREENSHOT.

16 THE COURT: OKAY. EACH COLOR IS A SCREENSHOT. NO?

17 THE WITNESS: THE -- EACH COLOR IS -- ACTUALLY, THE
18 DATA FOR EACH COLOR IS AVAILABLE IN EACH SCREENSHOT. SO --

19 THE COURT: OH, WELL, THEN, WHAT'S EACH COLOR?

11:21:15 20 THE WITNESS: SO IF YOU LOOK AT THE RED, IT
21 CORRESPONDS TO THE MAXIMUM FREQUENCY OF A SINGLE SCREENSHOT
22 THAT WE SEE HERE ON THE CHART (INDICATING).

23 SO THE RED WOULD CORRESPOND TO THESE NUMBERS (INDICATING).
24 THE BLUE CORRESPONDS TO THE MEAN NUMBERS (INDICATING). AND
11:21:31 25 THEN, THE GREEN CORRESPONDS TO THE MIN NUMBERS (INDICATING).

11:21:37 1 **THE COURT:** IT'S TAKING ALL THE SCREENSHOTS AND
2 RUNNING IT IN SOME WAY?

3 **THE WITNESS:** SO, IF I LOOK AT THE SCREENSHOT HERE,
4 WHAT I CAN SEE FROM THAT IS THE VALUE FOR THE -- THE AVERAGE
11:21:50 5 VALUE, THE VOLTAGE IS TWO VOLTS, ROUGHLY. RIGHT?

6 **THE COURT:** OKAY.

7 **THE WITNESS:** AND IF I LOOK HERE THAT MEANS IT IS TWO
8 VOLTS HERE (INDICATING). SO I'M PLOTTING THE THREE POINTS
9 THAT CORRESPOND TO THE MINIMUM, THE MAXIMUM, AND THE MEAN
11:22:06 10 FREQUENCY.

11 SO I'M TAKING A SET OF DATA FROM THAT SCREENSHOT, AND
12 GIVING -- AND PLOTTING THESE THREE POINTS. AND THEN, I'M
13 TAKING ANOTHER SCREENSHOT, PLOTTING THESE THREE POINTS. AND I
14 KEEP ON GOING SCREENSHOT BY SCREENSHOT.

11:22:25 15 **THE COURT:** IS THIS THE SAME TECHNIQUE THAT WAS
16 DESCRIBED IN CONNECTION WITH EARLIER EXHIBITS OF A SIMILAR
17 NATURE?

18 **THE WITNESS:** YES. SO THE -- THE WAY WE -- THE WAY
19 THAT THE ORIGINAL PLOTS THAT MR. CHUEH PROVIDED TO ME
11:22:43 20 ESSENTIALLY TOOK THE NUMBERS FROM THE SCREENSHOTS AND PLOTTED
21 THEM ONTO A PLOT. I JUST REDID THEM.

22 **MR. POLLACK:** ACTUALLY, DIFFERENT NUMBERS. DIFFERENT
23 PLOTS.

24 **THE COURT:** BUT FOR THIS PARTICULAR FUNCTION, I
11:23:00 25 THOUGHT THEY HADN'T DONE ANY, FOR THIS PARTICULAR --

11:23:03 1 **MR. POLLACK:** CORRECT, YOUR HONOR. THAT'S WHAT I'M
2 SAYING. THAT THIS PARTICULAR RELATIONSHIP WAS NEVER PLOTTED
3 BEFORE.

4 **THE COURT:** NO, I UNDERSTAND THAT. OKAY. WELL, IT'S
11:23:12 5 A LITTLE BIT MORE COMPLICATED BECAUSE IT ISN'T LIKE ONE
6 SCREENSHOT IS BEING SHOWN ON THERE. YOU'RE TAKING A WHOLE
7 COMPILATION OF SCREENSHOTS.

8 BUT WAS THAT WHAT WAS DONE FOR THE OTHER CHARTS, AS WELL?

9 **THE WITNESS:** CORRECT.

11:23:29 10 **THE COURT:** OKAY. AND YOU -- DID YOU TESTIFY THAT AT
11 YOUR DEPOSITION? DID ANYBODY ASK YOU ABOUT IT?

12 **THE WITNESS:** MY RECOLLECTION IS THAT MR. POLLACK
13 ASKED ME: "THERE'S -- THERE IS THESE TWO PLOTS. AND WHY
14 DIDN'T YOU ASK FOR A THIRD PLOT?"

11:23:44 15 AND MY RESPONSE WAS: "ACTUALLY, IF YOU LOOK AT THESE TWO
16 PLOTS, THE THIRD PLOT IS JUST A COMBINATION -- IT IS A SIMPLE
17 COMBINATION OF THESE TWO PLOTS. SO IT WASN'T NECESSARY FOR ME
18 TO ASK FOR AN ADDITIONAL PLOT BECAUSE I CAN EXTRACT THE SAME
19 INFORMATION, I CAN GET THE THIRD PLOT WITHOUT HAVING TO ASK
11:24:02 20 FOR IT."

21 **THE COURT:** OKAY. WELL, IT IS A LITTLE MORE
22 COMPLICATED THAN JUST PUTTING DOTS ON A BOARD.

23 WHAT WOULD THIS HELP THE JURY TO SEE?

24 **THE WITNESS:** INSTEAD OF HAVING TO LOOK AT AND
11:24:21 25 REMEMBER EACH NUMBER FROM 20 SCREENSHOTS, IT PUTS IT ALL

11:24:27 1 TOGETHER INTO ONE GRAPHIC.

2 AND SO, WE COULD STEP THROUGH IT ONE-BY-ONE, I SUPPOSE.

3 AND SAY, "OKAY, RECALL FOR THIS VOLTAGE, THE FREQUENCY IS 60,

4 THEN REMEMBER, RECALL NOW THAT FOR THIS NEW VOLTAGE, 2.1, THE

11:24:47 5 FREQUENCY IS 62," AND KEEP ON GOING AND KEEP ON GOING UNTIL WE

6 HAVE COVERED ALL OF THE SCREENSHOTS.

7 AND THEN, SAY: "SO, LADIES AND GENTLEMEN, REMEMBER THAT

8 FOR THE RANGE OF FEEDBACK VOLTAGES THAT I JUST PRESENTED TO

9 YOU, THE FREQUENCY WAS NOT A SINGLE NUMBER, BUT IT WAS, YOU

11:25:06 10 KNOW, MULTIPLE NUMBERS."

11 **THE COURT:** OKAY. NOW, IS THERE A REASON WHY YOU'RE

12 NOT PUTTING IN WHAT MIGHT BE CONSIDERED THE BASIS FOR THIS

13 PARTICULAR CHART, MS. ONDRICK?

14 IN OTHER WORDS, THIS IS CREATED. THERE ARE OTHER CHARTS

11:25:21 15 THAT SHOW INDIVIDUAL ASPECTS THAT HAVE THEN BEEN COMBINED IN

16 THIS CHART. IS THAT RIGHT OR NOT?

17 **THE WITNESS:** MAY I RESPOND?

18 **THE COURT:** YES.

19 **THE WITNESS:** SO, I BELIEVE THAT'S WHAT WE SPENT ALL

11:25:33 20 OF YESTERDAY DOING; ALL THE SCREENSHOTS THAT WERE ENTERED INTO

21 EVIDENCE.

22 **THE COURT:** OKAY. OKAY. LAST WORDS ON THIS, ONE WAY

23 OR THE OTHER, MR. POLLACK?

24 **MR. POLLACK:** SO, YOUR HONOR, I HAVE THE TRANSCRIPT.

11:25:51 25 I DO WANT TO HAND IT UP, BECAUSE --

11:25:54 1 **THE COURT:** OKAY.

2 **MR. POLLACK:** -- AGAIN, THIS IS -- THE WHOLE POINT IS
3 ADEQUATE DISCLOSURE, ADEQUATE ABILITY TO FIGURE OUT WHAT'S
4 REALLY GOING ON AND TO BE ABLE TO PROBE THAT.

11:26:04 5 AND, THIS IS FROM DR. WEI'S TRANSCRIPT IN SEPTEMBER.

6 THE DISCUSSION STARTS AT PAGE 139, AT LINE 12, WHERE I ASK
7 HIM, THERE'S NO INSTRUCTION TO DO THIS TYPE OF PLOT. AND
8 THEN, WE HAVE THIS DISCUSSION.

9 AND THEN I ASK HIM:

11:26:24 10 "YOU DIDN'T RELY ON THE UNDERLYING DATA OF THE
11 MEASUREMENTS. YOU RELIED WHAT'S SHOWN IN THESE
12 PLOTS, RIGHT?

13 "I RELIED ON THE DATA WHICH IS REPRESENTED BY THE
14 PLOTS. I MEAN, WE HAVE ALL PLOTTED EXCEL. WE KNOW
11:26:37 15 WHAT THEY MEAN. BUT THE DATA THAT'S..."

16 I SAID:

17 "I WANT TO MAKE SURE I UNDERSTAND, YOU EVALUATED
18 THESE PLOTS..."

19 **THE COURT:** OKAY. BUT AT THIS POINT, THE REPORTER
11:26:45 20 CAN'T TELL WHO'S TALKING WHEN.

21 **MR. POLLACK:** I'M SORRY. WHY DON'T I JUST HAND IT
22 UP, YOUR HONOR?

23 **THE COURT:** ALL RIGHT. DO YOU WANT TO HAND IT TO ME
24 AND JUST TELL ME THE LINES YOU WOULD LIKE ME TO LOOK AT?

11:26:56 25 **MR. POLLACK:** YES. I WOULD LIKE YOU TO READ FROM

11:26:58 1 PAGE 139, LINE 12, SO YOU HAVE THE WHOLE DISCUSSION.

2 THE COURT: OKAY.

3 MR. POLLACK: TO 142, LINE 21.

4 THE COURT: OKAY.

11:28:20 5 (DOCUMENT HANDED UP TO THE COURT)

6 (THE COURT EXAMINES DOCUMENT)

7 THE COURT: IF YOU HAD HAD AN OPPORTUNITY TO HAVE
8 THIS EARLIER, WHAT TYPES OF QUESTIONS WOULD YOU ASK THE
9 WITNESS, MR. POLLACK? OR WOULD YOU HAVE ASKED HIM?

11:28:48 10 MR. POLLACK: WHAT I COULD HAVE ASKED IS, IS
11 BASICALLY WHERE THE DATA COME FROM, YOU KNOW: "WHAT'S YOUR
12 UNDERSTANDING OF HOW IT WAS GENERATED?"

13 YOU KNOW, WHAT -- THE ISSUE WAS EXCEL VERSUS MATLAB. THE
14 INTERPOLATION OF THE DATA IS DIFFERENT. YOU SEE VERY
11:29:06 15 DIFFERENT REPRESENTATIONS OF IT.

16 I COULD HAVE EXPLORED THE FOUNDATION FOR WHAT IT WAS --

17 THE COURT: OKAY.

18 MR. POLLACK: -- AND --

19 THE COURT: ALL RIGHT. I'M GOING TO HAND THIS
11:29:16 20 TRANSCRIPT BACK TO YOU.

21 (DOCUMENT HANDED DOWN)

22 THE COURT: I CAN JUST SAY THAT IT APPEARS TO ME THAT
23 IF SOMEBODY WANTED TO ADD THIS TO THE OPINION OF THE WITNESS,
24 IT WOULD HAVE BEEN PREFERABLE TO ADD IT BY EITHER SOME
11:29:33 25 REQUESTED AMENDMENT TO A REPORT. OR OTHERWISE? BUT THAT

11:29:35 1 WASN'T DONE. SO, AT THIS POINT, I'M GOING TO SUSTAIN THE
2 OBJECTION TO USING THE GRAPH.

3 **MS. ONDRICK:** CAN I RAISE ONE MORE POINT, YOUR HONOR?

4 **THE COURT:** OKAY.

11:29:46 5 **MS. ONDRICK:** SO UNDER FEDERAL RULE OF EVIDENCE 1006,
6 A PROPONENT MAY USE SUMMARIES TO PROVE CONTENT OR CALCULATIONS
7 THAT ARE OTHERWISE TOO VOLUMINOUS TO BE PROVEN.

8 WE HAVE ALL OF THAT HERE. WE HAVE ALL THIS DATA.

9 **THE COURT:** OKAY. THIS IS NOT A SUMMARY. THIS IS A
11:30:01 10 PICTURE. THAT'S DIFFERENT. AND IT CAN HAVE A VERY PERSUASIVE
11 FORCE.

12 AS THEY SAY, A PICTURE'S WORTH A THOUSAND DOTS. AND
13 WORDS.

14 AND IN THIS INSTANCE, IT WOULD SEEM TO ME THAT IT WOULD BE
11:30:17 15 APPROPRIATE TO HAVE GIVEN THE PARTICULAR DOCUMENT TO COUNSEL
16 EARLIER. IT MAY ONLY BE USED HERE AS A DEMONSTRATIVE OR
17 OFFERED AS A DEMONSTRATIVE. BUT THIS IS, IN FACT, ESSENTIALLY
18 EVIDENCE.

19 AND IT REALLY ISN'T IN ANY WAY DISTINGUISHABLE FROM THAT.
11:30:37 20 AND UNDER THE CIRCUMSTANCES, I'M GOING TO SUSTAIN THE
21 OBJECTION.

22 **MS. ONDRICK:** OKAY. THEN, YOUR HONOR, ONE THING WE
23 HAVE DISCUSSED WITH COUNSEL IS THAT THEY HAVE ALLOWED THE
24 FREQUENCY VERSUS LOAD PLOTS (INDICATING).

11:30:46 25 AND WE HAVE THOSE AS PLOTS THAT WE COULD SUBSTITUTE IN FOR

11:30:50 1 THE PRESENTATION THEN. AND I -- I UNDERSTAND THAT THEY WOULD
2 NOT HAVE AN OBJECTION TO USING THOSE.

3 **THE COURT:** YEAH. THAT WAS WHAT I WAS ASKING
4 EARLIER.

11:31:00 5 **MS. ONDRICK:** YES.

6 **MR. POLLACK:** IF YOU USE THE ONES FROM THE REPORT --

7 **THE COURT:** WAIT. DO NOT TALK TO MS. ONDRICK. ALL
8 RIGHT?

9 **MR. POLLACK:** I AM SORRY, YOUR HONOR.

11:31:06 10 **THE COURT:** WE ARE NOT AT DEPOSITION. WE ARE IN A
11 TRIAL. WE ARE ON RECORD. I DON'T KNOW HOW MANY TIMES I HAVE
12 TO SAY THIS FOR PEOPLE WHO I'M SURE WERE AT THE TOP OF THEIR
13 CLASS AT THEIR RESPECTIVE LAW SCHOOLS. SO, IT'S A PRETTY
14 SIMPLE POINT.

11:31:18 15 OKAY. DO YOU WANT TO TRY THAT AGAIN?

16 **MR. POLLACK:** YOUR HONOR --

17 **THE COURT:** YOU JUST WON THIS PARTICULAR ARGUMENT.
18 OKAY.

19 **MR. POLLACK:** WHAT I SAID AND WHAT I AGREE TO IS IF
11:31:24 20 THEY USE THE PLOTS FROM THE REPORT THAT WE HAD THE OPPORTUNITY
21 TO EXPLORE WITH THE WITNESS, I DON'T HAVE AN OBJECTION TO
22 THAT.

23 **THE COURT:** FINE.

24 **MR. POLLACK:** I DON'T BELIEVE THAT WHAT MS. ONDRICK
11:31:32 25 IS NOW HOLDING IS SUCH A PLOT.

11:31:35 1

THE COURT: OH.

2

MR. POLLACK: THAT'S --

3

THE COURT: OKAY. DO YOU HAVE ANYTHING THAT ALREADY

4

GAVE THEM THAT YOU WANT TO USE?

11:31:44 5

MS. ONDRICK: I DO. BUT THEY HAVEN'T OBJECTED TO

6

THIS ONE (INDICATING), SO I'M A LITTLE CONFUSED.

7

THE COURT: CAN YOU LOOK AT WHATEVER SHE IS SHOWING

8

THERE, MR. POLLACK?

9

AND, APPARENTLY, BASED ON SOME EARLIER CONVERSATION,

11:31:55 10

MS. ONDRICK BELIEVES YOU DID NOT HAVE AN OBJECTION TO THIS

11

DOCUMENT.

12

(MR. POLLACK EXAMINES DOCUMENT)

13

MR. POLLACK: OKAY. THE CONVERSATION, AT LEAST FROM

14

OUR SIDE, IS UNDERSTOOD THAT YOU HAVE SOMETHING LIKE THIS

11:32:06 15

(INDICATING) FROM THE REPORT. THAT'S WHAT WE --

16

THE COURT: OKAY.

17

MR. POLLACK: THIS IS --

18

THE COURT: EXCUSE ME.

19

DO YOU HAVE SOMETHING LIKE THAT FROM THE REPORT,

11:32:13 20

MS. ONDRICK?

21

MS. ONDRICK: WE DO.

22

THE COURT: COULD YOU USE THAT?

23

MS. ONDRICK: WE CAN DO THAT, YES. BUT WE WILL NEED

24

A FEW MINUTES TO FIX THE SLIDES.

11:32:20 25

THE COURT: OKAY. THAT'S FINE. NOW, IT IS 11:30.

WE CAME BACK HERE AT AROUND 10:20 OR SO, I THINK.

COULD YOU HELP ME OUT ON THAT, MS. LUCERO?

THE CLERK: THAT'S CORRECT, YOUR HONOR.

THE COURT: OKAY. SHE SAYS I'M CORRECT. ALL RIGHT.

SO, WE HAVE BEEN HERE FOR ABOUT AN HOUR, I GUESS. A LITTLE MORE, ABOUT AN HOUR AND TEN MINUTES.

MS. ONDRICK: UH-HUH.

THE COURT: SO IF WE TOOK A BREAK NOW FOR YOU TO GET WHATEVER YOU WERE GOING TO GET -- IN OTHER WORDS, WE JUST TOOK 15 MINUTES NOW, THEN IT WOULD BE A QUARTER TO 12:00, AND -- WELL, THAT DOESN'T REALLY WORK.

WHY DON'T YOU JUST GET SET UP? WE WILL TELL THE JURY TO TAKE FIVE MINUTES. WE WILL GO TO 12:00, AND WE WILL TAKE A BREAK.

MS. ONDRICK: OKAY.

THE COURT: OKAY. ALL RIGHT. IF YOU WANT TO STAND DOWN AND --

MS. ONDRICK: I'LL GO AHEAD AND GET --

THE COURT: -- NOT BE ON DISPLAY, DR. WEI, THAT'S FINE.

THE WITNESS: THANK YOU, YOUR HONOR.

THE COURT: OKAY. FIVE MINUTES.

(RECESS TAKEN FROM 11:30 TO 11:40 A.M.)

(THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE PRESENCE OF THE JURY)

11:42:19 1 **THE CLERK:** COME TO ORDER.

2 **THE COURT:** ALL RIGHT.

3 (THE FOLLOWING PROCEEDINGS WERE HELD IN THE PRESENCE OF
4 THE JURY)

11:42:51 5 **THE CLERK:** PLEASE BE SEATED.

6 **THE COURT:** ALL RIGHT. WELL, SO MUCH FOR THE
7 TEN-MINUTE BREAK, LADIES AND GENTLEMEN.

8 THAT WAS OBVIOUSLY NOT AN ACCURATE ESTIMATE. HOLD ON FOR
9 JUST ONE MOMENT.

11:43:01 10 MS. LUCERO, COULD I SEE YOU QUICKLY?

11 (OFF-THE-RECORD DISCUSSION BETWEEN THE COURT AND CLERK)

12 **THE COURT:** OKAY. PLEASE CONTINUE, MS. ONDRICK.

13 **BY MS. ONDRICK:**

14 **Q** SO DR. WEI, LET'S TAKE A LOOK AT THESE SCREENSHOTS ONE
11:43:23 15 MORE TIME.

16 **A** OKAY.

17 **Q** SO IF WE LOOK AT ALL THE DATA THAT'S OUTPUT WITH THE
18 OSCILLOSCOPE TO SCREENSHOT CAPTURE, CAN WE PLOT THAT DATA IN A
19 MEANINGFUL WAY?

11:43:42 20 **A** YES. SO WHAT WE CAN DO IS -- WELL, THERE'S DIFFERENT WAYS
21 IN WHICH YOU CAN PLOT THE DATA IN TERMS OF WHAT YOU PUT ON THE
22 X AXIS, WHAT YOU PUT ON THE Y AXIS.

23 SO IF WE WERE ACTUALLY TO GO TO THAT OTHER SLIDE WITH ALL
24 FOUR.

11:43:58 25 (DOCUMENT DISPLAYED)

11:43:59 1 **A** ONE THING WE CAN DO IS PLOT THE FREQUENCY VALUES ON THE Y
2 AXIS WITH RESPECT TO THE DIFFERENT LOAD CONDITIONS, WHICH IS
3 THE CURRENT, THE LOAD CURRENT. AND THEN, WE CAN, THEREFORE,
4 TAKE THE -- I THINK IT'S MAYBE 30 PAGES OR SO OF DATA, AND
11:44:17 5 THEN PUT IT ONTO A PLOT.

6 (DOCUMENT DISPLAYED)

7 **Q** AND ARE WE SHOWING A PLOT LIKE THAT HERE?

8 **A** YES. SO WHAT WE SEE HERE IS WITH RESPECT TO DIFFERENT
9 LOAD CURRENT VALUES, WE NOTICE THAT THE MAXIMUM FREQUENCY OF
11:44:33 10 SWITCHING, THE MEAN OR AVERAGE FREQUENCY OF SWITCHING AND THE
11 MINIMUM FREQUENCY OF SWITCHING -- AND I THINK THE COLORS WERE
12 FLIPPED HERE (INDICATING). BUT THE MAXIMUM, AVERAGE AND
13 MINIMUM FREQUENCY OF SWITCHING FOR THE -- IN THIS CASE, THE
14 SG5841J, YOU CAN SEE THAT THE FREQUENCY IS VARYING.

11:44:53 15 IT'S GOING FROM MINIMUM TO A MAXIMUM, AND EVERYWHERE
16 IN-BETWEEN.

17 **Q** SO WOULD YOU HAVE THIS MINIMUM AND MAXIMUM BECAUSE OF
18 JITTER?

19 **A** YES. WE KNOW FOR THE 5841J IF YOU LOOK IN THE DATASHEET
11:45:09 20 THERE IS THIS REFERENCE TO THE HOPPING RANGE OF THE FREQUENCY.
21 AND IT SHOWS TYPICALLY PLUS OR MINUS 4.2 KILOHERTZ.

22 AND IF YOU LOOK, IT IS PLUS OR MINUS FOUR OR FIVE
23 KILOHERTZ. SO THE RESULTS ARE CONFIRMING WHAT THE DATASHEET
24 IS SAYING IN TERMS OF HOW THE FREQUENCY VARIES.

11:45:32 25 (DOCUMENT DISPLAYED)

11:45:33 1 **Q** IF WE GO BACK ONE SLIDE FOR A SECOND, IS THIS THE JITTER
2 BEING DISPLAYED ON THE OSCILLOSCOPE, ITSELF?

3 **A** YES. SO IF YOU LOOK AT THIS PARTICULAR PLOT -- AND I
4 DON'T KNOW IF YOU RECALL, BUT YESTERDAY THERE WAS THAT
11:45:45 5 ACCUMULATOR FUNCTION WHERE INSTEAD OF JUST TAKING A SINGLE
6 SNAPSHOT OF THE WAVEFORM, WHAT YOU CAN DO IS HAVE THE
7 EQUIPMENT KEEP THE PRIOR WAVEFORMS. AND SO YOU KIND OF
8 ACCUMULATE. IT IS ALSO CALLED "PERSISTENCE MODE" IN OTHER
9 TOOL -- OR OTHER OSCILLOSCOPE, BY OTHER -- IN OTHER TYPES OF
11:46:05 10 OSCILLOSCOPES.

11 AND, ESSENTIALLY, WHAT WE ARE SEEING HERE IS NOW THE
12 MULTIPLE WAVEFORMS ARE OVERLAID ON TOP OF EACH OTHER. AND SO
13 WHAT YOU CAN SEE IS THAT THERE'S THAT BLUR. AND THAT IS
14 DEMONSTRATING THE FREQUENCY JITTER OR THE FREQUENCY HOPPING.

11:46:20 15 (DOCUMENT DISPLAYED)

16 **Q** LET'S TAKE A LOOK AT THE SG5841, IF WE COULD.

17 **A** OKAY.

18 **Q** WHAT ARE YOU SHOWING HERE WITH THIS PLOT?

19 **A** SO THIS IS A PLOT THAT'S SIMILAR TO THE ONE WE JUST SAW
11:46:31 20 BEFORE WHERE ON THE X AXIS WE HAVE THE LOAD CURRENT, AND ON
21 THE Y AXIS WE HAVE THE FREQUENCY OF THE SWITCH, AND THE
22 KILOHERTZ RANGE?

23 AND WE NOTICE THAT AS THE LOAD CURRENT INCREASES, THE
24 FREQUENCY KEEPS ON INCREASING. AND THERE'S A SHARP SLOPE IN
11:46:49 25 THE BEGINNING AND THEN IT KIND OF TAILS OFF A LITTLE BIT.

11:46:53 1 BUT IF YOU ACTUALLY LOOK AT THE DATA FROM THE SCREENSHOTS
2 YOU WILL AGAIN SEE THAT THERE IS THIS FREQUENCY VARIATION.

3 (DOCUMENT DISPLAYED)

4 Q AND SO IF WE LOOK AT THE FAN103, WHAT IS THIS PLOT
11:47:08 5 SHOWING?

6 A SO THE FAN103, AGAIN, IS ANOTHER PART, AND ESSENTIALLY
7 SHOWING THE SAME THING HERE, WHERE IF YOU HAVE -- FOR THE
8 DIFFERENT LOAD CURRENT CONDITIONS, THE FREQUENCY -- AND YOU
9 MEASURE THE FREQUENCY. AND HERE, BECAUSE WE HAVE THAT
11:47:22 10 FREQUENCY HOPPING, THERE IS A MINIMUM FREQUENCY, A MAXIMUM
11 FREQUENCY.

12 SO WE KNOW THAT THE FREQUENCY IS HOPPING AROUND BETWEEN
13 THAT MIN AND MAX. AND THEN, THERE'S ALSO THAT MEAN FREQUENCY,
14 WHICH IS THE AVERAGE OF ALL OF THE FREQUENCIES THAT ARE
11:47:36 15 HOPPING AROUND.

16 Q OKAY.

17 (DOCUMENT DISPLAYED)

18 Q NOW, LET'S GO TO THE SG6841. WHAT IS THIS PLOT SHOWING?

19 A THE SG6841 IS YET ANOTHER PART. AND ACROSS THE LOAD
11:47:49 20 CURRENTS WHAT WE SEE IS THAT THE FREQUENCY IS VARYING. IT --
21 FOR LOW LOAD CURRENTS IT STARTS OUT AT A RELATIVELY LOW
22 FREQUENCY, AND THEN IT RISES.

23 AND, BASICALLY, AGAIN, YOU KNOW, WHAT'S SHOWING HERE --
24 WHAT'S SHOWN HERE IS THE AVERAGE FREQUENCY NUMBER THAT WAS
11:48:07 25 CAPTURED FROM THE OSCILLOSCOPE. AND IF YOU LOOK AT THE RAW

11:48:09 1 DATA, AND IF YOU WERE ACTUALLY TO LOOK AT THE NUMBERS ON THIS
2 OSCILLOSCOPE, YOU WILL AGAIN SEE THAT THERE IS SOMETHING
3 CALLED A "STANDARD DEVIATION" WHERE THE FREQUENCY IS STILL
4 KIND OF MOVING AROUND LITTLE BY LITTLE AS THE DEVICE IS
11:48:23 5 OPERATING.

6 Q SO THE FREQUENCY IS VARYING IN EACH OF THESE PLOTS.

7 A CORRECT.

8 (DOCUMENT DISPLAYED)

9 Q SO HERE YOU HAVE CALLED OUT JITTER, SPECIFICALLY. I GUESS
11:48:33 10 WE HAVE TALKED ABOUT SOME DIFFERENT KINDS OF FREQUENCY
11 VARIATION IN THE FAIRCHILD PRODUCTS.

12 A YEAH.

13 Q WHY ARE WE SINGLING OUT JITTER HERE?

14 A I THOUGHT IT MIGHT BE ILLUSTRATIVE TO SPEND A LITTLE BIT
11:48:43 15 OF TIME TALKING ABOUT JITTER YET AGAIN, ALTHOUGH WE HAVE BEEN
16 TALKING ABOUT IT A LOT, THIS NOTION OF FREQUENCY HOPPING.
17 BECAUSE IF YOU LOOK AT THE TWO REPRESENTATIVE PRODUCTS, JITTER
18 WAS ADDED IN AS INTENTIONAL. RIGHT? IT WAS PURPOSEFUL
19 VARYING OF THE FREQUENCY.

11:49:01 20 Q NOW, IN DR. KELLEY'S WORLD, AND IN HIS VIEW OF THE CLAIM
21 LANGUAGE IN THE COURT'S CONSTRUCTION, JITTER IS IRRELEVANT.

22 A THAT IS HOW I UNDERSTAND IT. ACCORDING TO DR. KELLEY FROM
23 WHAT I HEARD LAST WEEK, HE SAID, YES, THERE IS THIS THING
24 CALLED "FREQUENCY JITTER" OR "FREQUENCY HOPPING." BUT FOR THE
11:49:22 25 PURPOSES OF THIS PATENT, HE SAYS IT DOESN'T MATTER. AND SO

11:49:24 1 WHAT I'M SAYING HERE IS IT ACTUALLY DOES MATTER. THIS IS WHAT
2 WAS IN THE PRODUCTS. THIS WAS DONE INTENTIONALLY. AND
3 BECAUSE OF THIS, FREQUENCY VARIES.

4 Q OKAY.

11:49:33 5 (DOCUMENT DISPLAYED) AND SO HERE WE GO

6 Q AND SO HERE WE GO. THIS IS THE FAN103 PRODUCT AT DX 3107.

7 A YES. WE HAVE ALREADY SEEN THIS, SO, AGAIN, LET'S JUST
8 REFRESH OUR MEMORY VERY QUICKLY.

9 THE FAN103, IN THE SECTION THAT TALKS ABOUT FREQUENCY
11:49:48 10 HOPPING, WHAT IS SHOWING, AS WE SAW IN ONE OF THE OTHER
11 DEMONSTRATIVES BEFORE, IS THAT THAT FREQUENCY IS NOT STAYING
12 AT A SINGLE VALUE, BUT IT'S GOING UP. IT'S GOING DOWN. IT'S
13 GOING UP. AND IT'S GOING DOWN.

14 AND THAT'S JUST THE WAY THAT THESE PRODUCTS OPERATE.

11:50:02 15 Q AND IF WE LOOK, THAT'S A PRETTY BIG FREQUENCY VARIATION.
16 THAT IS 6,000 HERTZ, ISN'T IT?

17 A IT IS, BECAUSE IT IS INTENTIONAL. THERE IS A PURPOSE OF
18 DOING THIS IN THESE PRODUCTS.

19 Q THANK YOU, DR. WEI.

11:50:21 20 (DOCUMENT DISPLAYED)

21 Q AND HERE IS A LITTLE MORE THAT WE HAVE FROM THE FAN103
22 DATASHEET, AS WELL.

23 A YEAH. IT IS JUST KIND OF RECONFIRMING THAT FREQUENCY
24 HOPPING EXISTS.

11:50:29 25 Q AND THEN, IF WE MOVE ON TO THE SG5841J.

11:50:34 1 (DOCUMENT DISPLAYED)

2 Q THAT STANDS FOR "JITTER," RIGHT?

3 A SO --

4 Q WHAT ARE YOU SHOWING HERE?

11:50:38 5 A -- AS WE HAVE BEEN HEARING, THERE IS 5841, 5841J. AND
6 THAT "J" STANDS FOR "JITTER." AND THAT JITTER WE HAVE BEEN
7 TALKING ABOUT IS FREQUENCY HOPPING. AND ALL I'M SHOWING HERE
8 IS THAT THERE IS THIS FREQUENCY VARIATION THAT EXISTS BECAUSE
9 OF THAT FREQUENCY HOPPING.

11:50:54 10 AND THERE IS DATA IN THE DATASHEET THAT DESCRIBES KIND OF
11 HOW IT'S -- HOW IT PERFORMS.

12 (DOCUMENT DISPLAYED)

13 Q AND THIS IS JUST ANOTHER ONE OF THOSE JITTER SLIDES WE
14 HAVE ALREADY SEEN.

11:51:08 15 A YES.

16 (DOCUMENT DISPLAYED)

17 Q SO CAN YOU TELL US WHAT YOU ARE SHOWING HERE? YOU HAVE
18 GOT SWITCHING FREQUENCY OVER TIME PLOTTED.

19 A SO, WHAT I'M SHOWING HERE IS KIND OF ANOTHER WAY TO
11:51:20 20 REPRESENT THE DATA THAT'S BEEN COLLECTED. I DON'T KNOW IF YOU
21 RECALL, BUT WHAT YOU CAN DO ON THE OSCILLOSCOPE IS YOU CAN
22 KIND OF ZOOM OUT. INSTEAD OF ZOOMING IN, YOU CAN ZOOM OUT AND
23 SEE A LOT OF CYCLES. OKAY?

24 AND THEN, WHAT YOU CAN DO IS GO TO MAYBE -- LET'S SAY THE
11:51:41 25 TENTH CYCLE. MEASURE WHAT THE PERIOD OF THE SWITCHING IS

11:51:45 1 THERE.

2 AND THEN, YOU CAN GO TO, LET'S SAY, THE 50TH CYCLE.
3 MEASURE THAT TIME PERIOD, AND KIND OF DO IT ACROSS A BIG
4 COLLECTION OF CYCLES. OKAY?

11:51:56 5 AND SO WHAT'S PLOTTED HERE IS THE FREQUENCY OF ONE PERIOD
6 HERE, THE FREQUENCY OF ANOTHER PERIOD THERE, OVER TIME.
7 BECAUSE BEFORE WE WERE JUST LOOKING AT SNAPSHOTS IN TIME. BUT
8 NOW LET'S LOOK AT WHAT THE FREQUENCY IS DOING OVER, YOU KNOW,
9 ACROSS A PERIOD OF TIME.

11:52:13 10 AND SO, WHAT'S SHOWN HERE IS THAT THE X AXIS IS TIME. AND
11 THE Y AXIS IS DEMONSTRATING THAT THE FREQUENCY IS MOVING
12 AROUND, UP AND DOWN, UP AND DOWN.

13 AND THAT'S BECAUSE, FOR THESE TWO PARTS ESPECIALLY, ITS
14 FREQUENCY HOPPING IS IN THERE, SO YOU ARE SEEING THAT
11:52:32 15 FREQUENCY HOPPING IN ACTION IN TIME THROUGH THIS PLOT.

16 **Q** NOW, YOUR PLOTS DIDN'T CALCULATE THE DATA OVER A FULL
17 SECOND. IS THAT CORRECT?

18 **A** THE PLOTS DO NOT CALCULATE THE DATA OVER A FULL SECOND.
19 WHAT I'M SHOWING IS UP TO 6.5 MILLISECONDS AND NOT A FULL
11:52:50 20 SECOND.

21 WHAT IT'S SHOWING IS THE FREQUENCY OF A SWITCHING CYCLE,
22 SWITCHING CYCLE, SWITCHING CYCLE.

23 **Q** IF YOU HAD PLOTTED THE SWITCHING CYCLES OVER ONE SECOND,
24 WOULD IT HAVE CHANGED YOUR OPINION?

11:53:02 25 **A** ACTUALLY, IT WOULD HAVE NOT HAVE CHANGED MY OPINION. IT

11:53:05 1 WOULD HAVE JUST TAKEN A LOT LONGER TO BE ABLE TO COLLECT THAT
2 DATA.

3 BUT, EFFECTIVELY, IF YOU HAVE THIS -- IF YOU WERE TO TAKE
4 A ONE-SECOND WINDOW AND SLIDE IT ACROSS, AND COMPUTE THIS, YOU
11:53:18 5 WOULD ALSO, AGAIN, SEE THESE VARIATIONS.

6 Q OKAY. NOW, LET'S MOVE ON TO --

7 (DOCUMENT DISPLAYED)

8 Q -- THE THIRD BULLET THAT YOU HAD FOR FREQUENCY VARIATIONS.

9 I BELIEVE YOU OFFERED THE OPINION THAT THE -- THAT THERE

11:53:36 10 ARE SOME EXAMPLES OF FAIRCHILD PRODUCTS WHERE THEY ARE IN
11 POWER SUPPLIES WHERE THEY'RE COUPLED SUCH THAT THEY DON'T HAVE
12 A FIXED SWITCHING FREQUENCY. IS THAT CORRECT?

13 A THAT'S CORRECT.

14 Q AND CAN YOU TELL US WHAT YOU ARE SHOWING HERE, THIS SLIDE?

11:53:49 15 A WHAT WE ARE LOOKING AT IS A DOCUMENT THAT'S DESCRIBING THE
16 FIVE-WATT CHARGER. AND I BELIEVE THIS IS FOR THE FAN103. WE
17 CAN SEE THAT IN THERE.

18 AND THEN, THE PICTURES CORRESPOND TO DIAGRAMS OR PICTURES
19 OF THE BOARD. AND I THINK IF WE RECALL, MR. CHUEH YESTERDAY
11:54:09 20 MENTIONED THAT, YOU KNOW, ONCE THE BOARD HAS BEEN COMPLETED,
21 YOU HAVE THAT GLUE, THAT WHITE GLUE, THAT KIND OF PUTS
22 EVERYTHING IN PLACE.

23 AND SO THIS IS THE BOARD THAT WAS -- THAT CORRESPONDS TO
24 THIS APPLICATION.

11:54:22 25 Q AND, CAN YOU TELL US WHAT DX 3291 IS?

11:54:26 1 **A** DX 3291 IS THE -- THE EVALUATION -- IT IS A DESCRIPTION OF
2 THE EVALUATION BOARD. AND I BELIEVE THERE IS TESTING IN
3 THERE, TESTING RESULTS IN THERE, AS WELL, FOR A POWER SUPPLY
4 THAT HAS THIS FAN103 CHIP INSIDE IT.

11:54:43 5 **Q** OKAY.

6 (DOCUMENT DISPLAYED)

7 **Q** SO LET'S GO TO YOUR NEXT SLIDE. WHAT ARE YOU SHOWING HERE
8 WITH RESPECT TO DX 3107 FOR THE FAN103?

9 **A** SO WHAT'S SHOWN IN HERE, THIS IS NOW INSIDE. I BELIEVE
11:54:59 10 THIS IS THE DATASHEET FOR THE FAN103.

11 AND SO, AGAIN, THAT IS THE DOCUMENT THAT DESCRIBES HOW
12 THIS PARTICULAR PRODUCT OPERATES. AND, IF YOU LOOK AT SOME OF
13 THE ILLUSTRATIONS INSIDE THE DATASHEET, WHAT WE SEE, FOR
14 EXAMPLE, IS FIGURE 23. AND I'VE IDENTIFIED THERE IS A
11:55:20 15 DESCRIPTION OF HOW THIS DEVICE OPERATES.

16 IT'S GOT A STANDBY MODE. IT'S GOT A GREEN MODE. IT'S GOT
17 THIS HEAVY MODE. AND, FURTHER, THE DATASHEET PROVIDES
18 INFORMATION AS TO HOW YOU DELINEATE THE DIFFERENT MODES OF
19 OPERATION.

11:55:36 20 OKAY? AND THEN --

21 **Q** SO LET ME ASK YOU THIS.

22 **A** OKAY.

23 **Q** IN A FIVE-VOLT, ONE-AMP MOBILE PHONE BATTERY CHARGER
24 APPLICATION, WOULD THE POWER SUPPLY EVER LEAVE THE GREEN MODE?

11:56:03 25 **A** I THINK WE WILL TAKE A LOOK AT THE RESULTS. WHEN YOU TAKE

11:56:05 1 A LOOK AT THE RESULTS, WE CAN CONFIRM THAT IN THIS POWER
2 SUPPLY APPLICATION, ONE -- FIVE WATTS, ONE AMP, THE DEVICE
3 DOES NOT LEAVE THAT GREEN MODE.

4 Q SO IT ALWAYS STAYS HERE. IT NEVER GOES INTO THE IDEALIZED
11:56:20 5 FLAT LINE SHOWN, FIGURE 23. IS THAT CORRECT?

6 A THAT'S CORRECT.

7 Q SO IS THIS ALWAYS THE VARIABLE FREQUENCY OPERATION?

8 A IT ALWAYS HAS THAT VARIABLE FREQUENCY OPERATION, BUT IT
9 DOES NOT HAVE THAT FIXED FREQUENCY OPERATION, NO MATTER HOW
11:56:32 10 YOU WANT TO CALL IT.

11 Q IS THIS PURPLE BOX HIGHLIGHTING THE AREA OF OPERATION OF A
12 FIXED FREQUENCY IDENTIFIED BY DR. KELLEY FOR HIS INFRINGEMENT
13 ANALYSIS?

14 A THAT'S CORRECT.

11:56:44 15 Q SO THE FAN301 NEVER GETS THERE? IS THAT YOUR OPINION?

16 A IT'S THE FAN103 NEVER GETS THERE.

17 Q WHAT ARE YOU SHOWING HERE?

18 (DOCUMENT DISPLAYED)

19 A WHAT I'M SHOWING HERE, AGAIN, IS -- SINCE THIS IS A PLOT
11:56:58 20 THAT WE HAVE SEEN ALREADY, BUT, AGAIN, WE CAN USE THE SAME
21 PLOT TO MAKE YET ANOTHER POINT, IS IF WE LOOK ACROSS THE FULL
22 RANGE OF LOAD CURRENTS.

23 SO, REMEMBER, THAT BOARD WAS A FIVE-WATT OR ONE-AMP POWER
24 SUPPLY.

11:57:18 25 SO IT CAN SUPPLY CURRENTS TO THE LOAD UP TO A MAXIMUM OF

11:57:22 1 ONE AMP. AND WHAT WE NOTICE IS IF WE LOOK AT THE FREQUENCY,
2 THE SWITCHING FREQUENCY WITH RESPECT TO THAT CURRENT, OVER
3 THAT ENTIRE RANGE, IT'S ALWAYS CHANGING. IT'S GOING UP AND UP
4 AND UP AND UP.

11:57:37 5 Q AND IT'S THE STRUCTURE OF THE POWER SUPPLY ITSELF
6 (INDICATING) THAT KEEPS THE FAN103 ALWAYS IN A VARIABLE
7 FREQUENCY RANGE, EVEN AS IDENTIFIED BY DR. KELLEY.

8 A THAT'S CORRECT.

9 Q SO TO THIS POINT I THINK WE HAVE COVERED OUR OPINIONS ON
11:57:58 10 INFRINGEMENT. IS THAT RIGHT, DR. WEI?

11 A YES.

12 Q DO YOU HAVE AN UNDERSTANDING OF WHAT INFRINGEMENT UNDER
13 THE DOCTRINE OF EQUIVALENTS IS?

14 A YES. SO IF YOU LOOK INTO A PATENT CLAIM AND YOU FIND THAT
11:58:10 15 THERE IS A CERTAIN ELEMENT OR A CERTAIN LIMITATION THAT IS NOT
16 MET WITH THIS PARTICULAR PRODUCT, YOU CAN STILL TRY TO -- YOU
17 CAN STILL FIND THAT A PRODUCT INFRINGES UNDER THIS NOTION OF A
18 DOCTRINE OF EQUIVALENTS. OKAY?

19 AND THERE'S ACTUALLY THREE WAYS IN WHICH YOU CAN APPLY, I
11:58:29 20 GUESS, OR UTILIZE DOCTRINE OF EQUIVALENTS. ONE IS THERE'S A
21 FUNCTION/WAY/RESULT TEST, WHERE YOU LOOK AT THE PRODUCT, AND
22 THEN YOU LOOK AT THAT ELEMENT. AND THIS HAS TO BE DONE ON A
23 CLAIM-ELEMENT-BY-CLAIM-ELEMENT BASIS.

24 AND YOU SAY, OKAY, WHAT IS THE FUNCTION? WHAT IS THE WAY
11:58:48 25 THAT THAT FUNCTION IS IMPLEMENTED? WHAT IS THE RESULT? AND,

11:58:51 1 IF THE PRODUCT IMPLEMENTS THE FUNCTION IN A -- IN A
2 SUBSTANTIALLY SIMILAR WAY, OR IT IMPLEMENTS A SUBSTANTIALLY --
3 SUBSTANTIALLY THE SAME FUNCTION, IN SUBSTANTIALLY THE SAME WAY
4 TO ACHIEVE SUBSTANTIALLY THE SAME RESULT, THEN YOU CAN SAY
11:59:12 5 THAT THOSE ARE EQUIVALENT. OKAY?

6 IT IS A BIT COMPLICATED, BUT ONCE YOU GET USED TO IT, IT
7 WORKS REALLY WELL.

8 YOU CAN ALSO THINK -- THERE IS ANOTHER WAY, WHICH IS
9 ANOTHER TYPE OF DOCTRINE OF EQUIVALENTS, CALLED "INSUBSTANTIAL
11:59:30 10 DIFFERENCE."

11 SO YOU LOOK AT THIS PRODUCT. YOU LOOK AT THE ELEMENT, AND
12 YOU SAY: "WELL, IT IS NOT THAT DIFFERENT. IT'S
13 INSUBSTANTIAL."

14 AND THEN, THE THIRD IS, I THINK, CALLED
11:59:42 15 "INTERCHANGEABILITY." YOU CAN TAKE THIS BLOCK OUT, REPLACE IT
16 WITH ANOTHER ONE. AND IF IT'S STILL ALL OPERATING THE SAME
17 WAY, THEN THESE TWO THINGS ARE EQUIVALENT.

18 Q SO WITH REGARD TO SWITCHED FREQUENCY, DID YOU HEAR
19 DR. KELLEY OFFER THE OPINION, "WELL, IF -- IF THE FAIRCHILD
12:00:00 20 PRODUCTS AREN'T FIXED, THEY'RE CLOSE ENOUGH"?

21 A RIGHT. SO --

22 Q SO WHAT IS YOUR RESPONSE AS TO THAT, DR. WEI?

23 A SO DR. KELLEY, HE HAD GONE THROUGH THE INITIAL -- HIS
24 ANALYSIS FOR LITERAL INFRINGEMENT.

12:00:12 25 AND THEN, HE SAID: "WELL, IF THIS ELEMENT IS ACTUALLY NOT

12:00:17 1 THERE, YOU CAN SAY THAT IT'S THERE BECAUSE OF THE DOCTRINE OF
2 EQUIVALENTS."

3 AND HE USED THE FUNCTION/WAY/RESULT TEST. OKAY?

4 AND, SO, HE TRIED TO ARGUE THAT THEY'RE EQUIVALENT. BUT
12:00:27 5 IF WE ACTUALLY LOOK AT THE WAY, THAT WAY DOESN'T WORK, BECAUSE
6 WHAT THE -- THE WAY THAT IS CALLED FOR IS TO NOT VARY THE
7 FREQUENCY WHEN THE FEEDBACK VOLTAGE IS ABOVE A THRESHOLD IN
8 THAT FIRST RANGE. AND THEN IT'S VARYING, THERE IS A VARYING
9 FREQUENCY WHEN IT IS BELOW THE THRESHOLD IN SOME SECOND RANGE.

12:00:48 10 AND SO, THAT WAY, IT DOESN'T PERMIT VARIATIONS AT ALL WHEN
11 YOU ARE IN THAT FIRST RANGE.

12 AND SO, WHAT I'M SAYING IS THAT THAT DOESN'T WORK BECAUSE,
13 AS WE SAW, THERE'S VARIATION IN THAT FIRST RANGE.

14 Q AND NOW, WHAT ABOUT THE RESULT?

12:01:07 15 A THE RESULTS, AS WE CAN SEE HERE, THAT'S CALLED FOR IS THAT
16 THE FREQUENCY -- THE SWITCHING FREQUENCY VARIES WHEN THE
17 FEEDBACK SIGNAL'S BELOW A THRESHOLD, AND THAT THE SWITCHING
18 FREQUENCY IS NONVARYING WHEN IT'S ABOVE A THRESHOLD IN THAT
19 FIRST RANGE.

12:01:22 20 AND THE RESULT IS NOT THE SAME.

21 Q AND SO, IT'S THINGS LIKE TEMPERATURE, INPUT VOLTAGE,
22 JITTER, ALL THESE FACTORS THAT WE HAVE BEEN DISCUSSING THAT
23 HAVE BEEN CAUSING THESE VARIATIONS?

24 A CORRECT. SO BECAUSE OF IS ALL THOSE FACTORS WE SAW THAT
12:01:38 25 THERE WAS A VARYING OR NOT A NONVARYING FREQUENCY IN THAT

12:01:42 1 FIRST RANGE.

2 Q OKAY.

3 (DOCUMENT DISPLAYED)

4 Q AND ARE YOU AWARE OF ANY EVIDENCE THAT WAS PUT FORWARD AT

12:01:51 5 THE PATENT OFFICE TO SHOW HOW SOMEONE SHOULD LOOK AT WHETHER

6 THIS FREQUENCY VARIATION IS MEANINGFUL WHEN YOU ARE LOOKING AT

7 A PARTICULAR CIRCUIT?

8 A YES. SO, AGAIN, WHEN WE ARE TALKING ABOUT THESE PATENTS

9 AND THE CLAIMS AND THE WORDS, I MEAN, IT'S -- DIFFERENCES

12:02:05 10 MATTER. WE HAVE TO BE VERY PRECISE.

11 AND, BASICALLY, WHAT POWER INTEGRATIONS ARGUED TO THE

12 PATENT OFFICE WAS TO SAY THAT -- THERE WAS ACTUALLY A PRIOR

13 ART REFERENCE THAT WAS BROUGHT FORTH.

14 AND THE PATENT OFFICE INITIALLY SAID, "YOU KNOW, IF YOU

12:02:25 15 LOOK AT THIS, THIS SEEMS TO BE THE SAME AS WHAT YOUR CLAIM IS

16 SAYING. AND, THEREFORE, I DON'T SEE WHY YOUR CLAIM IS VALID."

17 AND, THE -- AND POWER INTEGRATIONS CAME BACK AND SAID:

18 "ACTUALLY, IF YOU LOOK AT THIS DOCUMENT, IF YOU UNDERSTAND

19 WHAT THE TECHNOLOGY UNDERLYING IT IS SAYING, IS EVEN THOUGH IT

12:02:45 20 LOOKS LIKE IT'S KIND OF FIXED, IT IS ACTUALLY NOT FIXED.

21 THERE IS A SLOW, GRADUAL SLOPE. AND, THEREFORE, YOU CANNOT

22 SAY THAT THAT'S A FIXED FREQUENCY."

23 OKAY? SO THEY MADE A VERY CLEAR DISTINCTION THAT THERE IS

24 A DIFFERENCE BETWEEN THESE TWO THINGS.

12:03:01 25 Q AND COULD YOU JUST HIGHLIGHT HERE WHAT YOU ARE SHOWING

12:03:04 1 RIGHT HERE? THIS IS FROM THE '079 REEXAM FILE HISTORY.

2 IS THIS POWER INTEGRATIONS' WORDS?

3 **A** YES. I BELIEVE THIS IS THE -- ONE OF THE RESPONSES THAT
4 POWER INTEGRATIONS GAVE TO THE PATENT OFFICE DURING THAT
12:03:16 5 REEXAM PROCESS FOR THE '079 PATENT.

6 AND WHAT IT SAYS HERE IS THAT ZHOU, WHICH IS THAT ARTICLE,
7 IT IS A PAPER THAT WAS WRITTEN BY SOME FOLKS. AND SAYS:
8 "ZHOU'S FIGURE 21 CORRELATES THE FREQUENCY TO THE OUTPUT
9 CURRENT, AND SHOWS THAT THE OUTPUT FREQUENCY CONTINUOUSLY
12:03:36 10 VARIES. AND AS THE FIGURE SHOWS, UNDER LOW OUTPUT CURRENT,
11 THE FREQUENCY VARIES SUBSTANTIALLY WITH THE LOAD, BUT UNDER
12 LIGHT" -- NO, SORRY.

13 "UNDER HIGHER OUTPUT CURRENTS, THE FREQUENCY VARIES
14 MORE SLOWLY."

12:03:56 15 AND THEN, IF WE LOOK AT FIGURE 21, I THINK IT IS MORE
16 ILLUSTRATIVE OF WHAT THAT STATEMENT IS SAYING.

17 **Q** SO WHY DON'T WE GO THERE?

18 (DOCUMENT DISPLAYED)

19 **Q** THIS IS JUST THE COVER OF THE ARTICLE, SO IT'S DX 5445?

12:04:09 20 **A** YES.

21 (DOCUMENT DISPLAYED)

22 **Q** AND HERE WE GO.

23 **A** AND SO THAT IS THAT FIGURE 21 WHERE POWER INTEGRATIONS
24 ARGUED THAT, YES, THERE IS THIS VARIABLE FREQUENCY RANGE. BUT
12:04:19 25 IF YOU LOOK HERE, EVEN THOUGH IT LOOKS PRETTY FLAT

12:04:23 1 (INDICATING), THERE IS A SLIGHT GRADUAL SLOPE. AND THAT IS
2 DIFFERENT.

3 Q AND IT'S NOT PERFECTLY FLAT, IS IT?

4 (DOCUMENT DISPLAYED)

12:04:33 5 A IT'S NOT PERFECTLY FLAT.

6 Q AND THIS LOOKS PRETTY SIMILAR TO WHAT WE SAW WITH
7 FAIRCHILD'S NONJITTER PRODUCTS.

8 (DOCUMENT DISPLAYED)

9 A THAT'S CORRECT.

12:04:45 10 (DOCUMENT DISPLAYED)

11 Q SO, LET'S TALK A LITTLE BIT ABOUT JITTER, SEPARATELY, FOR
12 DOCTRINE OF EQUIVALENTS ANALYSIS. DO YOU HAVE A SEPARATE
13 OPINION UNDER THE DOCTRINE OF EQUIVALENTS, AS IT APPLIES TO
14 JUST THE JITTER PRODUCTS?

12:05:02 15 A YES.

16 Q AND AS I UNDERSTAND IT, WAS JITTER INCLUDED IN YOUR
17 ORIGINAL DOE POSITIONS THAT YOU JUST GAVE, AS WELL?

18 A MY DOE POSITION THAT I JUST DESCRIBED IS FOR ALL THE
19 PRODUCTS. BUT THEN, REMEMBER, THAT THERE IS TWO PRODUCTS THAT
12:05:18 20 ALSO IMPLEMENT JITTER, THAT FREQUENCY HOPPING FUNCTION. SO
21 I'M JUST ADDRESSING THE DOE POSITION FOR THE FREQUENCY
22 HOPPING.

23 AND IF WE LOOK HERE, I GUESS WHAT I'M SAYING HERE IS THAT
24 IT'S NOT AN INSUBSTANTIAL DIFFERENCE. THERE'S A BIG

12:05:37 25 DIFFERENCE BETWEEN A PRODUCT THAT HAS JITTER OR DOES NOT HAVE

12:05:39 1 JITTER. OKAY?

2 AND, THE PATENT REQUIRES BOTH VARYING -- AND ACCORDING TO
3 DR. KELLEY, THE PATENT REQUIRES BOTH VARYING THE FREQUENCY
4 BELOW THE THRESHOLD -- SO YOU HAVE THAT REGION WHERE YOU HAVE
12:05:51 5 THE FREQUENCY THAT VARIES -- AND HOLDING THE FREQUENCY FIXED
6 ABOVE THE THRESHOLD.

7 AND SO IF YOU HAVE TO HOLD THE FREQUENCY FIXED, BUT THEN
8 YOU HAVE A PRODUCT THAT DOESN'T HOLD THE FREQUENCY FIXED, BUT
9 IS PURPOSELY VARYING THE FREQUENCY, THAT'S DIFFERENT.

12:06:12 10 Q ALL RIGHT. THANK YOU, DR. WEI.

11 (DOCUMENT DISPLAYED)

12 Q SO I THINK WE HAVE DEFINITELY COVERED "FIXED FREQUENCY."
13 SO CAN YOU SUMMARIZE WHAT YOUR OPINION IS FOR THE "CONTROL
14 CIRCUIT COUPLED TO SWITCH THE POWER SWITCH AT A FIXED
12:06:28 15 SWITCHING FREQUENCY FOR A FIRST RANGE OF FEEDBACK VALUES"?

16 A YES. SO, AGAIN, COMING BACK TO THAT FIRST CHART, WE HAVE
17 TO CHECK OFF.

18 WHAT WE SEE IS FOR CLAIM 34, WITH RESPECT TO THIS
19 PARTICULAR ELEMENT, IT IS MY OPINION THAT THE LIMITATION IS
12:06:42 20 NOT MET FOR THE "FIXED SWITCHING FREQUENCY FOR A FIRST RANGE
21 OF FEEDBACK SIGNAL VALUES."

22 AND THAT IS BASED ON EVERYTHING THAT WE HAVE SEEN SO FAR.
23 THAT IS TRUE FOR THE SG6841, THE FAN103, THE SG584 -- 5841,
24 THE SG5841J, AND THE SG3842G.

12:07:05 25 AND BECAUSE, AS WE SAW, THAT THE FREQUENCY VARIES, AND

12:07:08 1 THEN THE FAN103 AND THE 5841J, THEY BOTH HAVE THAT FREQUENCY
2 HOPPING JITTER FUNCTION.

3 **THE COURT:** OKAY, NOW, MS. ONDRICK, THE WITNESS IS
4 THEN GOING INTO ANOTHER TOPIC AT THIS POINT?

12:07:22 5 **MS. ONDRICK:** YES, YOUR HONOR.

6 **THE COURT:** WELL, ALTHOUGH WE HAD A CHUNK OF TIME
7 THAT WAS TAKEN OUT OF OUR SCHEDULE THIS MORNING, IT IS 12:05,
8 SO WE PROBABLY SHOULD TAKE A BREAK UNLESS SOMETHING IS VERY
9 SHORT, AND I DON'T EXPECT IT WILL BE.

12:07:36 10 **MS. ONDRICK:** OKAY.

11 **THE COURT:** SO, LADIES AND GENTLEMEN, WE WILL TAKE
12 OUR HOUR'S NOON BREAK. PLEASE COME BACK AT FIVE AFTER 1:00.
13 THANK YOU.

14 (JURY EXCUSED)

12:07:48 15 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
16 PRESENCE OF THE JURY)

17 **THE COURT:** ALL RIGHT. YOU MAY STEP DOWN, DR. WEI.
18 THANK YOU. PLEASE BE BACK AT 1:05.

19 (WITNESS EXCUSED FROM THE STAND)

12:08:08 20 **THE COURT:** ALL RIGHT. HOW LONG DO YOU EXPECT THAT
21 DR. WEI IS GOING TO BE ON? IS HE GOING TO BE ON BEYOND TODAY
22 AT THIS POINT?

23 **MS. ONDRICK:** NO, I DON'T BELIEVE SO.

24 **THE COURT:** MR. JACOBS THINKS HE WILL BE.

12:08:18 25 **MR. JACOBS:** HE WILL BE DONE TODAY.

12:08:19 1 **THE COURT:** OH, HE WILL BE DONE TODAY?

2 **MR. JACOBS:** YES, YOUR HONOR.

3 **THE COURT:** OH, GOOD. ALL RIGHT.

4 WELL, THEN, WE WILL GO AHEAD AND TAKE THE BREAK. AND

12:08:25 5 THEN, WE WILL BE BACK AND CONTINUE WITH DR. WEI, I GUESS,

6 AFTER 1:00.

7 THANK YOU.

8 (RECESS TAKEN FROM 12:07 TO 1:05 P.M.)

9 (THE FOLLOWING PROCEEDINGS WERE HELD OUT OF THE PRESENCE

12:11:30 10 OF THE JURY)

11 **THE CLERK:** PLEASE COME TO ORDER.

12 **THE COURT:** EVERYONE READY FOR THE JURY?

13 **MR. SCHERKENBACH:** WE ARE.

14 **THE COURT:** ALL RIGHT. PLEASE CALL THEM IN.

01:06:53 15 (THE FOLLOWING PROCEEDINGS WERE HELD IN THE PRESENCE OF

16 THE JURY)

17 **THE CLERK:** PLEASE BE SEATED.

18 **THE COURT:** OKAY. LADIES AND GENTLEMEN, WE WILL BE

19 CONTINUING WITH DR. WEI.

01:07:22 20 DR. WEI, WOULD YOU PLEASE RETAKE THE STAND?

21 (REQUEST COMPLIED WITH BY THE WITNESS)

22 **THE COURT:** THANK YOU. OKAY. WHENEVER YOU ARE

23 READY.

24 **DIRECT EXAMINATION, RESUMED**

01:07:38 25 **BY MS. ONDRICK:**

01:07:39 1 Q WELCOME BACK, DR. WEI.

2 A THANK YOU.

3 Q SO LETS'S MOVE ON TO YOUR SECOND OPINION FOR THE '079
4 PATENT, IF WE COULD.

01:07:43 5 A OKAY.

6 Q AND CAN YOU REMIND US WHAT THAT OPINION IS?

7 A YES. SO, FOR THE SECOND OPINION, THE FAIRCHILD PRODUCTS
8 DO NOT INCLUDE A SWITCH.

9 (DOCUMENT DISPLAYED)

01:07:57 10 Q AND SO, WE'RE BACK HERE TO OUR CLAIM CHART. AND, I SEE
11 THAT THE CLAIM ELEMENT IS THE "POWER SWITCH COUPLED BETWEEN
12 THE FIRST AND SECOND TERMINALS." IS THAT CORRECT?

13 A CORRECT.

14 Q ALL RIGHT.

01:08:08 15 (DOCUMENT DISPLAYED)

16 Q WHAT ARE YOU SHOWING HERE?

17 A SO, WHAT I'M SHOWING HERE IS -- AND I THINK WE HAVE SEEN
18 THIS ALREADY FOR EACH OF THE REPRESENTATIVE PRODUCTS. AND IF
19 YOU LOOK IN THE DATASHEETS -- AND THIS IS SOMETHING THAT'S
01:08:20 20 BEEN DISCUSSED -- THERE IS NO POWER SWITCH IN ANY OF THESE
21 PARTICULAR PRODUCTS.

22 (DOCUMENT DISPLAYED)

23 Q AND THERE IS REALLY NOT MUCH OF A DISAGREEMENT OVER THAT,
24 IS THERE?

01:08:32 25 A THAT'S CORRECT. DR. KELLEY, I BELIEVE, DURING TRIAL LAST

01:08:34 1 WEEK MENTIONED THAT -- AGREED THAT THERE IS NO POWER SWITCH IN
2 THESE DEVICES; THAT THE POWER SWITCH IS EXTERNAL.

3 (DOCUMENT DISPLAYED)

4 Q SO IF WE GO AHEAD AND CHECK THE BOX FOR THAT ONE.

01:08:50 5 A YES. SO THIS LIMITATION IS NOT MET.

6 (DOCUMENT DISPLAYED)

7 Q NOW, LET'S TURN ON YOUR THIRD OPINION FOR THE '079
8 PATENTS. AND COULD YOU TELL US WHAT THAT OPINION IS?

9 A YES. SO IN CONTRAST TO THE FIRST ONE THAT WE DISCUSSED
01:09:06 10 BEFORE LUNCH, THIS ONE, THIS THIRD OPINION, IT RELATES TO THAT
11 SECOND REGION WHERE WE HAVE THE VARYING FREQUENCY WITH RESPECT
12 TO THE FEEDBACK VOLTAGE. AND, THE CLAIM REQUIRES THAT WITHOUT
13 SKIPPING CYCLES.

14 (DOCUMENT DISPLAYED)

01:09:23 15 Q AND WE SEE THAT HERE?

16 A THAT'S CORRECT.

17 Q SO LET'S GO AHEAD AND GET INTO THIS ONE.

18 (DOCUMENT DISPLAYED)

19 Q SO IF WE LOOK AT YOUR NEXT SLIDE WE ARE SHOWING THE
01:09:33 20 COURT'S CLAIM CONSTRUCTION FOR THIS CLAIM ELEMENT. CAN YOU
21 TELL US WHAT WE SEE HERE?

22 A SURE. SO FOR THIS PARTICULAR ELEMENT, I HAVE APPLIED THE
23 COURT'S CLAIM CONSTRUCTION. AND THE COURT'S CLAIM
24 CONSTRUCTION STATES THAT FOR "VARYING A SWITCHING FREQUENCY OF
01:09:48 25 THE POWER SWITCH WITHOUT SKIPPING CYCLES," THAT OUGHT TO BE

01:09:52 1 CONSTRUED AS "CHANGING THE NUMBER OF SWITCHING CYCLES PER
2 SECOND OF THE POWER SWITCH IN RESPONSE TO THE FEEDBACK SIGNAL
3 WHILE CONTINUING TO TURN THE SWITCH ON IN EACH CYCLE."

4 Q AND YOU APPLIED THAT CONSTRUCTION IN YOUR ANALYSIS,
01:10:06 5 DR. WEI?

6 A YES, I DID.

7 Q AND JUST TO TAKE THIS ONE ON DIRECTLY, IS THERE ANYTHING
8 IN THE PRODUCT DATASHEETS THAT YOU SAW THAT DISCUSSED CYCLE
9 SKIPPING?

01:10:19 10 A IN THE DATASHEETS, NO.

11 Q OKAY. WAS THERE ANYTHING IN ANY OTHER DOCUMENTATION THAT
12 YOU SAW?

13 (DOCUMENT DISPLAYED)

14 A I DON'T RECALL SEEING THAT IN THE DOCUMENTATION.

01:10:29 15 (DOCUMENT DISPLAYED)

16 Q OKAY. IF WE LOOK AT THE -- YOUR OPINIONS FOR THIS
17 PARTICULAR CLAIM ELEMENT, THEN IT IS ALL BASED ON THE TESTING.
18 IS THAT RIGHT?

19 A YES. SO IF YOU LOOK AT THE TESTING RESULTS YOU WILL SEE
01:10:44 20 THE CYCLE SKIPPING.

21 (DOCUMENT DISPLAYED)

22 Q AND SO WHAT ARE YOU SHOWING HERE WITH REGARD TO THE
23 SG6841?

24 A SO IF YOU LOOK, THIS IS A PAIR OF SCREENSHOTS FROM TESTING
01:10:55 25 FOR THE SG6841. AND IF YOU LOOK CLOSELY, IT'S ACTUALLY THE

01:11:01 1 SAME SCREENSHOT, EXCEPT THAT THERE ARE TWO DIFFERENT
2 MEASUREMENTS THAT WERE MADE.

3 THE MEASUREMENT FOR THE SCREENSHOT ON THE LEFT-HAND SIDE,
4 IT SHOWS THAT THE CYCLE, THE SWITCHING FREQUENCY IS 10.9
01:11:14 5 KILOHERTZ. AND THEN, ON THE RIGHT-HAND SIDE, WHAT WE SEE IS
6 THAT THE SWITCHING FREQUENCY IS 5.5 KILOHERTZ.

7 AND FOR THE SG6841, THE MINIMUM FREQUENCY IS AT -- OF THE
8 OSCILLATOR IS AROUND 10 KILOHERTZ. SO WHEN WE SEE THE RESULT
9 ON THE RIGHT-HAND SIDE, WITH A 5.5 KILOHERTZ, THAT MEANS THAT
01:11:37 10 IT'S MISSING A PULSE IN THE MIDDLE, SO IT'S SKIPPING CYCLES.

11 **Q** OKAY. SO, NOW, I THINK ONE OF THE THINGS DR. KELLEY HAD
12 TALKED ABOUT IN HIS TESTIMONY WHEN HE DESCRIBED CYCLE SKIPPING
13 WAS YOU HAVE TO KNOW THE FREQUENCY OF THE OSCILLATOR, YOU NEED
14 TO SHOW THAT HERE. NOW, YOU DON'T SHOW THAT HERE ON THIS
01:12:02 15 TEST. IS THAT RIGHT?

16 **A** THAT'S CORRECT. SO, THE OSCILLATOR IS A CIRCUIT ELEMENT
17 THAT'S WITHIN THE -- THE CONTROLLER CHIP. AND THE OUTPUT OF
18 THAT OSCILLATOR IS NOT BROUGHT OUT TO ONE OF THE PINS, SO IT'S
19 NOT EASY TO PUT A PROBE AND LOOK AT WHAT THE OSCILLATOR IS
01:12:20 20 DOING.

21 IF WE WANTED TO ACTUALLY LOOK AT THE OSCILLATOR, YOU WOULD
22 HAVE TO BREAK OPEN THE CHIP AND TRY TO GET INSIDE THE CHIP.
23 BREAK OPEN THE PACKAGE AND TRY TO GET INSIDE THE CHIP ITSELF?

24 AND THAT WOULD ACTUALLY END UP DESTROYING THE CHIP. SO
01:12:33 25 WHAT WE CAN DO IS BY UNDERSTANDING, BY LOOKING AT THE

01:12:36 1 SCHEMATICS, LOOKING AT THE DATASHEETS AND UNDERSTANDING HOW
2 THIS DEVICE OPERATES, THEN I CAN KNOW WHAT THE -- I CAN KNOW
3 WHAT THE OSCILLATOR IS DOING AND KNOW THAT THE OSCILLATOR, FOR
4 THIS EXAMPLE, THE MINIMUM FREQUENCY, AS SPECIFIED IN THE
01:12:50 5 DATASHEET, IS 10 KILOHERTZ, OR ROUGHLY 10.9 KILOHERTZ.

6 AND, THEREFORE, WHEN WE SEE THAT 5 KILOHERTZ, THERE IS A
7 CYCLE THAT'S BEING SKIPPED.

8 (DOCUMENT DISPLAYED)

9 Q AND IF WE THE TURN TO YOUR NEXT SLIDE, WHAT ARE YOU
01:13:08 10 SHOWING HERE? LOOKS LIKE SOME OF THE TESTING SETUPS THAT WE
11 SAW WITH MR. CHUEH.

12 A THAT'S RIGHT. SO THIS IS A SCHEMATIC SHOWING THE ENTIRE
13 POWER SUPPLY. AND IT DESCRIBES HOW THAT SURGE/ESD TEST WAS
14 PERFORMED. AND IT'S THE RESULTS OF THIS SURGE/ESD TEST THAT
01:13:28 15 WE WILL LOOK AT, THAT FURTHER SHOWS CYCLE SKIPPING.

16 Q AND YOU KNOW WHAT, DR. WEI? THAT RAISES A GOOD POINT.

17 (DOCUMENT DISPLAYED)

18 (REPORTER INTERRUPTION)

19 Q FOR THE SG6841, DR. WEI, THE CYCLE SKIPPING TEST WE JUST
01:13:46 20 TALKED ABOUT WAS A CYCLE SKIP BY NO-LOAD TEST. IS THAT RIGHT?

21 A THAT'S CORRECT.

22 (DOCUMENT DISPLAYED)

23 Q AND SO NOW FOR THE 6841, THERE'S A DIFFERENT TYPE OF TEST.

24 A SO, THESE RESULTS THAT WE'RE LOOKING AT ARE FOR THE
01:14:05 25 SURGE/ESD TEST THAT YOU HEARD ABOUT.

01:14:08 1 AND WHAT WE SEE HERE ARE FOUR SCREENSHOTS FROM THE
2 OSCILLATOR PUT TOGETHER. AND IT MAY BE A LITTLE DIFFICULT TO
3 SEE, BUT -- WELL, THE EASIER NUMBERS TO SEE ARE THE FEEDBACK
4 VALUES.

01:14:23 5 SO THERE IS THE 1.63 VOLTS, A FEEDBACK VALUE OF 1.75, 1.9,
6 2.4 (INDICATING).

7 AND SO BY LOOKING AT THE DATASHEET AND UNDERSTANDING HOW
8 THIS DEVICE WORKS, WHEN THE FEEDBACK VOLTAGE IS IN THIS RANGE
9 FROM 1.63 TO 2.4, THEN THE DEVICE IS OPERATING IN THIS
01:14:44 10 VARIABLE FREQUENCY -- WITH VARIABLE FREQUENCY.

11 AND THEN, IF WE ZOOM IN A LITTLE BIT, OR JUST TAKE A CLOSE
12 LOOK, WHAT YOU WILL NOTICE IS THE GREEN LINE HERE, IT ACTUALLY
13 IS BUMPING AROUND A LITTLE BIT. AND THEN, THERE'S A LITTLE
14 PULSE, AND THEN IT GOES BACK TO BUMPING AROUND. THAT IS THAT
01:15:05 15 ESD/SURGE BEING APPLIED.

16 AND WHEN THAT OCCURS, WHAT WE WILL NOTICE IS THAT THE
17 PULSES THAT ARE COMING ALONG HERE, THERE'S A PAUSE. AND THEN,
18 IT RESUMES. AND SO, THEY'RE CYCLE SKIPPING DURING THAT PERIOD
19 OF TIME.

01:15:22 20 AND THAT IS TRUE FOR EACH AND EVERY ONE OF THE PLOTS THAT
21 WE ARE LOOKING AT.

22 **Q** AND SO, LET ME ASK YOU THIS: IS SURGE SOMETHING THAT
23 SOMEONE WOULD CONSIDER A FAULT CONDITION? OR A NORMAL
24 OPERATING CONDITION?

01:15:42 25 **A** WELL, YOU KNOW, IT'S A POWER SUPPLY THAT I PLUG INTO THE

01:15:45 1 WALL AND I WANT IT TO OPERATE UNDER A VARIETY OF DIFFERENT
2 CONDITIONS.

3 I WANT TO MAKE SURE THAT MY DEVICE DOESN'T BLOW UP. I
4 WANT TO MAKE SURE THAT IT'S GOING TO CONTINUE TO WORK. SO
01:15:57 5 IT'S A PART OF WHAT I WOULD WANT MY DEVICE TO DO.

6 (DOCUMENT DISPLAYED)

7 **Q** AND IF WE TAKE A LOOK AT THE FAN103 PRODUCT, WHAT IS THIS
8 OSCILLOSCOPE SCREENSHOT SHOWING?

9 **A** SO, FOR THE FAN103, WHAT'S SHOWING HERE IS SIMILAR TO
01:16:14 10 THE -- THE SCREENSHOTS THAT WE SAW IN THE PREVIOUS PAGE.
11 EXCEPT NOW WE ARE JUST LOOKING AT ONE SCREENSHOT. AND THE --
12 WE CAN SEE THAT PULSE AGAIN. IT IS ACTUALLY NARROW HERE
13 (INDICATING) BECAUSE IN THIS PARTICULAR EXAMPLE, WE'VE KIND OF
14 ZOOMED OUT AS FAR AS THE TIME SCALE IS CONCERNED.

01:16:34 15 AND, AGAIN, WHAT WE CAN SEE IS THAT WITH THAT PULSE THERE,
16 THE TIME BETWEEN A -- A RED PULSE HERE (INDICATING), TO THE
17 NEXT RED PULSE, THAT PERIOD OF TIME IS 8.49 MILLISECONDS.

18 AND, 8.49 MILLISECONDS THEN CORRESPONDS TO THE 117 HERTZ.
19 AND FOR THIS PARTICULAR PRODUCT, THE FAN103, THE MINIMUM
01:17:00 20 FREQUENCY, AS SHOWN IN THE DATASHEET, IS 370 HERTZ.

21 SO, AGAIN, WE HAVE THE SITUATION WHERE THE OSCILLATOR AT
22 MINIMUM CAN ONLY OPERATE AT 370 HERTZ. BUT THE TIME BETWEEN
23 THE PULSE -- THE RED PULSES IS 117 HERTZ. AND, THEREFORE,
24 THERE MUST BE CYCLE SKIPPING IN-BETWEEN.

01:17:21 25 **Q** AND THIS (INDICATING) IS ANOTHER CYCLE SKIPPING AT NO-LOAD

01:17:24 1 TEST, CORRECT?

2 **A** THIS IS -- THE CONDITION IS NO LOAD AT THE OUTPUT. BUT
3 THERE'S A SURGE/ESD TEST BEING APPLIED.

4 **MS. ONDRICK:** AND FOR THE RECORD, THAT IS DX5442.26.

01:17:39 5 (DOCUMENT DISPLAYED)

6 AND IF WE COULD JUST GO BACK QUICKLY. FOR THE
7 SG6841, NO-LOAD TEST, THAT WAS DX 5441.23-A AND B.

8 (DOCUMENT DISPLAYED)

9 AND FOR THE SG6841 SECOND SET OF TESTS, THAT WAS DX 5709
01:18:04 10 AT DX 4555 TO -58.

11 (DOCUMENT DISPLAYED)

12 AND FOR THE FAN103 IT WAS DX 44226.

13 (DOCUMENT DISPLAYED)

14 **BY MS. ONDRICK:**

01:18:25 15 **Q** NOW, LET'S TURN TO THE 5841 PRODUCT, DR. WEI. WHAT IS
16 YOUR OPINION FOR THAT PRODUCT?

17 **A** SO, IF WE LOOK AT THE TEST RESULTS, NOW, FOR THE 5841,
18 WHICH IS A DIFFERENT PRODUCT FROM THE 5841J, BUT THE SAME
19 TESTS, THE ESD/SURGE TEST WAS PERFORMED.

01:18:46 20 AND, AGAIN, FOR A RANGE OF FEEDBACK VALUES. AND THIS IS
21 FOR THE RANGE OF FEEDBACK VALUES, YOU CAN SEE THAT THE
22 FREQUENCY WHEN THE FEEDBACK VOLTAGE IS 1.64, THE FREQUENCY IS
23 A LITTLE BIT LOWER.

24 AND THEN, AS THE FEEDBACK VOLTAGE INCREASES, THE FREQUENCY
01:19:03 25 GETS A LITTLE HIGHER (INDICATING). AND THEN GETS A LITTLE

01:19:06 1 HIGHER, AND GETS A LITTLE HIGHER (INDICATING).

2 AND THEN, WITH THAT SURGE TEST APPLIED, WHAT WE NOTICE IS
3 THERE'S THIS GAP HERE IN THE PULSES. AND SO WE KNOW THAT
4 THERE'S CYCLE SKIPPING HERE AGAIN.

01:19:20 5 **Q** AND, WE KNOW ALSO FROM THESE PLOTS THAT THIS IS WHEN WE'RE
6 IN THE GREEN MODE OF OPERATION, AS WELL, WHEN WE ARE LOOKING
7 AT THESE. IS THAT CORRECT?

8 **A** THAT IS CORRECT.

9 **MS. ONDRICK:** AND, FOR THE RECORD, THE SCREENSHOTS
01:19:29 10 FOR THE SG5841 ARE AT DX 5709, AT DX 4426 THROUGH-29.

11 (DOCUMENT DISPLAYED)

12 **BY MS. ONDRICK:**

13 **Q** OKAY. NOW, WE ARE AT THE DIFFERENT FLAVOR OF THE 5841, WE
14 HAVE THE SG5841J. WHAT IS YOUR OPINION FOR THAT PRODUCT?

01:19:52 15 **A** SO FOR THE SG5841J, WHICH IS SIMILAR TO THE SG5841, SAME
16 SET OF TESTS WERE APPLIED. AND, AGAIN, WHAT WE WILL NOTICE IS
17 THAT WHEN THERE IS THE SURGE APPLIED, THERE IS THIS GAP HERE
18 (INDICATING). AND THAT SHOWS US THAT THERE'S CYCLE SKIPPING.

19 **MS. ONDRICK:** AND, FOR THE RECORD THAT'S -- THE
01:20:13 20 SCREENSHOTS ARE FOUND AT DX 5709, AT DX 4482 TO -85.

21 **THE COURT:** ARE YOU PLANNING ON PUTTING IN ANY OF THE
22 UNDERLYING EXHIBITS OR NOT?

23 **MS. ONDRICK:** THEY ARE ALREADY IN, YOUR HONOR.

24 **THE COURT:** I DON'T KNOW IF ALL OF THEM ARE. SOME OF
01:20:32 25 THEM THAT YOU REFERENCED BEFORE -- WELL, I WAS JUST LOOKING AT

01:20:35 1 THE SCREEN. DID YOU REFERENCE 4422?

2 **MS. ONDRICK:** I BELIEVE, YOUR HONOR, THOSE WERE ALL
3 PUT IN AS PART OF THE DX 5709 EXHIBIT.

4 **THE COURT:** OKAY, THE COLLECTIVE EXHIBIT. OKAY.
01:20:48 5 THAT'S FINE, THEN. I HAVEN'T CHECKED. I DON'T THINK I HAVE
6 IT, SO I DON'T KNOW WHICH ONES ARE INCLUDED IN IT.

7 AS LONG AS THEY ARE ALL IN THERE, THAT'S FINE. OKAY.

8 (DOCUMENTS DISPLAYED)

9 **MS. ONDRICK:** YES.

01:21:05 10 (DOCUMENTS DISPLAYED)

11 **BY MS. ONDRICK:**

12 **Q** SO IF YOU COULD SUMMARIZE YOUR OPINIONS WITH REGARD TO
13 LITERAL INFRINGEMENT WITH THIS CLAIM LIMITATION.

14 **A** SO IN TERMS OF LITERAL INFRINGEMENT I FIND THAT THIS
01:21:18 15 LIMITATION IS NOT MET, BECAUSE WHAT WE SAW THE CLAIM REQUIRES
16 IS SECOND -- THIS GREEN MODE -- FOR THE SECOND RANGE OF
17 FEEDBACK SIGNALS, THE FREQUENCY VARIES WITHOUT SKIPPING
18 CYCLES.

19 ACTUALLY, WE SHOULD GO TO THE CLAIM TERM AGAIN, WHICH IS
01:21:38 20 ESSENTIALLY THE LAST PART OF THAT. THE CLAIM CONSTRUCTION
21 SAYS: "WHILE SWITCHING EACH CYCLE."

22 AND WHAT WE SAW IS THAT THERE ARE THESE GAPS, AND SO IT'S
23 NOT SWITCHING EACH CYCLE.

24 (DOCUMENT DISPLAYED)

01:21:56 25 **A** YEAH, THIS ONE.

01:21:56 1 SO THE CLAIM CONSTRUCTION -- THE COURT'S CLAIM
2 CONSTRUCTION FOR "VARYING A SWITCHING FREQUENCY OF THE POWER
3 SWITCH WITHOUT SKIPPING CYCLES" IS -- IS CONSTRUED AS BEING
4 "CHANGING THE NUMBER OF SWITCHING CYCLES PER SECOND OF THE
01:22:10 5 POWER SWITCH IN RESPONSE TO THE FEEDBACK SIGNAL WHILE
6 CONTINUING TO TURN THE SWITCH ON IN EACH CYCLE."

7 AND WHAT WE SAW FROM THE TEST RESULTS IS THAT IT DOES NOT
8 CONTINUE TO TURN THE SWITCH ON AT EACH CYCLE.

9 Q NOW, DO YOU HAVE AN OPINION ON WHETHER THE FAIRCHILD
01:22:31 10 PRODUCTS MEET THIS CLAIM LIMITATION UNDER THE DOCTRINE OF
11 EQUIVALENTS?

12 A I DO.

13 Q OKAY.

14 MS. ONDRICK: MR. BERK, COULD WE GO TO DDX 482?

01:23:07 15 (OFF-THE-RECORD DISCUSSION)

16 (DOCUMENT DISPLAYED)

17 BY MS. ONDRICK:

18 Q OKAY. AND WHAT IS YOUR OPINION?

19 A SO THIS IS REFERRING BACK TO THE NOTION OF DOCTRINE OF
01:23:16 20 EQUIVALENTS.

21 AND "VARYING THE FREQUENCY WITH CYCLE SKIPPING" IS NOT
22 EQUIVALENT TO "WITHOUT CYCLE SKIPPING."

23 "VARYING THE FREQUENCY WITH CYCLE SKIPPING" IS NOT
24 EQUIVALENT TO "WITHOUT CYCLE SKIPPING." I THINK I MAY HAVE
01:23:34 25 READ THE WORDS WRONG.

01:23:36 1 Q SO HE DOESN'T SAY AN EQUIVALENT IS TO NOT HAVE CYCLE
2 SKIPPING? IT'S HAVING CYCLE SKIPPING?

3 A WELL, YEAH. THAT'S KIND OF THE CONFUSING PART. BUT
4 EITHER YOU CAN READ IT OR I CAN READ THAT TEXT.

01:23:52 5 Q SURE. SO LET'S GO AHEAD AND READ WHAT DR. KELLEY'S
6 TESTIMONY WAS (AS READ):

7 "QUESTION: EXPLAIN FOR US WHAT YOUR ANALYSIS
8 IS THERE.

9 "ANSWER: WELL, HERE IS THE
01:24:04 10 FUNCTION/WAY/RESULT TEST AGAIN. IN EACH OF
11 THESE PRODUCTS, I LOOKED FOR THE FUNCTION,
12 FOUND THE COUPLED TO THE CONTROL SWITCHING
13 FREQUENCY. I FOUND THE VARYING THE SWITCHING
14 FREQUENCY WITHOUT SKIPPING CYCLES IN RESPONSE
01:24:20 15 TO THE FEEDBACK SIGNAL, FOR THIS SECOND
16 RANGE."

17 SO WHAT IS YOUR UNDERSTANDING OF WHAT HE'S SAYING THERE?

18 A SO, MY UNDERSTANDING IS FOR DR. KELLEY -- FOR DR. KELLEY'S
19 DOCTRINE OF EQUIVALENTS POSITION, IT STILL REQUIRES WITHOUT
01:24:35 20 CYCLE SKIPPING. AND, THERE'S CYCLE SKIPPING.

21 Q OKAY. SO THEN, IS YOUR OPINION --

22 A RIGHT. SO IT'S MY OPINION THAT THIS LIMITATION IS NOT MET
23 WITH RESPECT TO THE DOCTRINE OF EQUIVALENTS.

24 (DOCUMENT DISPLAYED)

01:24:54 25 Q AND WE CAN GO AHEAD AND MARK THAT OPINION AS NOT MET?

01:24:56 1 **A** CORRECT.

2 **Q** SO WE ARE AT THE END OF YOUR OPINIONS FOR THE '079 PATENT,

3 DR. WEI.

4 **A** YES.

01:25:01 5 **Q** SO IF WE COULD JUST SUMMARIZE A FEW OF THEM.

6 **A** SURE. SO IT IS MY OPINION THAT THE ACCUSED PRODUCTS DO

7 NOT INFRINGE CLAIM 34 FOR THE REASONS THAT WE LOOKED THROUGH.

8 THEY'RE THE THREE THAT WE JUST SAW. THE LIMITATIONS ARE NOT

9 MET. THE FIRST, ON TOP WE CAN SEE THAT THERE IS NO POWER

01:25:26 10 SWITCH IN THE FAIRCHILD PRODUCTS. AND THEN, AS FAR AS THE

11 SECOND LIMITATION IS CONCERNED, WHICH REQUIRES "THE CONTROL

12 CIRCUIT COUPLED TO SWITCH THE POWER SWITCH AT A FIXED

13 SWITCHING FREQUENCY FOR A FIRST RANGE OF FEEDBACK SIGNAL

14 VALUES."

01:25:42 15 AND, OF COURSE, APPLYING THE COURT'S CLAIM CONSTRUCTION

16 WITH RESPECT TO "FIXED SWITCHING FREQUENCY," WHICH, IF YOU

17 RECALL, IT'S A "NONVARYING NUMBER OF SWITCHING CYCLES PER

18 SECOND." AND THAT LIMITATION IS ALSO NOT MET.

19 AND THEN, WE JUST SAW THE THIRD, WHERE THE ACCUSED

01:26:02 20 FAIRCHILD PRODUCTS SKIP CYCLES.

21 **Q** AND COULD YOU JUST ONE MORE TIME EXPLAIN FOR US THE

22 DIFFERENCE BETWEEN YOUR OPINION AND DR. KELLEY'S OPINION WITH

23 REGARD TO THE "FIXED SWITCHING FREQUENCY" CLAIM LIMITATION?

24 **A** SURE. SO, IF YOU RECALL WHAT DR. KELLEY HAD SAID -- I

01:26:21 25 BELIEVE IT WAS LAST WEEK -- AND WE SAW A SNIPPET FROM THE

01:26:24 1 TRIAL TESTIMONY FROM LAST WEEK. DR. KELLEY SAID THAT FOR
2 "FIXED SWITCHING FREQUENCY," YOU COUNT THE NUMBER OF SWITCHING
3 CYCLES WITHIN ONE SECOND.

4 AND IF YOU THINK ABOUT THAT CONCEPT -- AND THIS IS WHAT I
01:26:42 5 DISAGREE WITH -- IT'S KIND OF LIKE THE ANALOGY, I THINK, THAT
6 MR. JACOBS BROUGHT UP EARLY ON IN THE TRIAL, WHERE IF YOU'RE
7 DRIVING DOWN 101, RIGHT? AND YOU ARE DRIVING DOWN -- DRIVING
8 TO GO TO THE AIRPORT, IF YOU HIT TRAFFIC -- SO YOU'RE -- LET'S
9 SAY YOU ARE DRIVING AT 70 MILES AN HOUR -- MILES PER HOUR.

01:27:01 10 AND THEN, YOU SLOW DOWN TO 50 MILES PER HOUR. AND THEN, YOU
11 SPEED UP, AND YOU SLOW DOWN, SPEED UP AND SLOW DOWN, THEN YOUR
12 SPEED IS FLUCTUATING BETWEEN 70 MILES PER HOUR AND 50 MILES
13 PER HOUR.

14 BUT, ACCORDING TO DR. KELLEY'S INTERPRETATION, IF OVER
01:27:19 15 ONE-HOUR PERIOD, YOU TAKE THE AVERAGE -- AND THAT'S 60 MILES
16 PER HOUR -- THAT IT'S FIXED. BUT WE KNOW THAT THE SPEED WAS
17 FLUCTUATING THERE DURING THAT ENTIRE PERIOD OF TIME.

18 **Q** SO, CAN WE THINK ABOUT THE DIFFERENCE BETWEEN OR THE
19 DISAGREEMENT BETWEEN YOU AND DR. KELLEY AS THE DISTINGUISH --
01:27:42 20 A DISTINGUISHMENT BETWEEN RATE AND A UNIT OF MEASURE?

21 **A** SURE. SO SWITCHING, SWITCHING FREQUENCY, CYCLES PER
22 SECOND IS A RATE. WHEREAS, WITH DR. KELLEY, IT IS KIND OF
23 LIKE LOOKING AT YOUR SPEEDOMETER VERSUS LOOKING AT YOUR
24 ODOMETER. RIGHT?

01:27:58 25 DR. KELLEY SAID YOU DRIVE, LET'S SAY, A HUNDRED MILES.

01:28:01 1 AND IF YOU DROVE 100 MILES WITHIN AN HOUR, THEN YOU DROVE
2 100 MILES PER HOUR. WHEREAS, WHAT I'M SAYING IS IF YOU LOOK
3 AT YOUR SPEEDOMETER, YOUR SPEED FLUCTUATES BACK AND FORTH, OR
4 CAN FLUCTUATE BACK AND FORTH.

01:28:19 5 Q THANK YOU, DR. WEI.

6 (DOCUMENT DISPLAYED)

7 Q SO NOW LET'S TAKE A LOOK AT WHAT YOU ARE SHOWING HERE. I
8 SEE YOU HAVE GOT CLAIM 34 MAPPED AGAINST CLAIMS 31, 38 AND 42,
9 THE OTHER ASSERTED CLAIMS HERE FOR THE '079 PATENT.

01:28:35 10 WHAT ARE YOU SHOWING?

11 A SO HERE, RECALL THAT WE JUST WENT THROUGH CLAIM 34, BUT
12 THERE ARE THREE OTHER ASSERTED CLAIMS. AND IF WE LOOK AT
13 CLAIM 31, 38 AND 42, WHAT WE SEE IS THAT SAME LIMITATION OF A
14 POWER SWITCH IN EACH OF THE OTHER CLAIMS.

01:28:55 15 Q SO YOUR OPINION IS --

16 A MY OPINION, THEREFORE, IS THAT CLAIMS 31, 38 AND 42, ALSO
17 THAT LIMITATION IS NOT MET.

18 Q IS THAT NOT MET LITERALLY OR UNDER DOCTRINE OF
19 EQUIVALENTS?

01:29:06 20 A THIS IS NOT MET LITERALLY.

21 (DOCUMENT DISPLAYED)

22 Q NEXT, IF WE COULD TURN TO YOUR NEXT SLIDE, I SEE THAT YOU
23 ARE MAPPING CLAIM ELEMENT 34B AGAINST THE SAME CLAIMS.

24 CAN YOU DESCRIBE WHAT YOU ARE SHOWING HERE?

01:29:20 25 A YES. SO, THE OTHER TWO DISCUSSIONS THAT WE HAD ARE SHOWN

01:29:25 1 IN THE GREEN AND THE BLUE. AND IF WE LOOK AT CLAIMS 31, 38
2 AND 42 -- YEAH, AND 42, WE SEE THAT SAME LANGUAGE AGAIN IN
3 THESE OTHER CLAIMS.

4 AND BECAUSE WE ALREADY SAW THAT THESE TWO LIMITATIONS IN
01:29:40 5 CLAIM 34 ARE NOT MET FOR THE ACCUSED REPRESENTATIVE PRODUCTS,
6 THEREFORE IT'S ALSO FURTHER NOT MET FOR CLAIMS 31, 38 AND 42.

7 **Q** AND THAT IS FOR BOTH LIMITATIONS, CORRECT?

8 **A** THAT IS FOR BOTH LIMITATIONS.

9 **Q** AND THAT WOULD BE AN OPINION THAT THERE IS NO LITERAL
01:29:57 10 INFRINGEMENT OR INFRINGEMENT UNDER THE DOCTRINE OF
11 EQUIVALENTS. IS THAT CORRECT?

12 **A** THAT IS CORRECT.

13 **Q** OKAY.

14 **MS. ONDRICK:** MR. BERK, CAN WE PLEASE GO TO DDX 486,
01:30:27 15 PLEASE.

16 (DOCUMENT DISPLAYED)

17 (DOCUMENT TAKEN OFF DISPLAY)

18 (DOCUMENT DISPLAYED)

19 **BY MS. ONDRICK:**

01:30:49 20 **Q** SO DR. WEI, CAN YOU TELL US YOUR OPINIONS FOR THE '908
21 PATENT, PLEASE?

22 **A** SO WE FINISHED UP THE '079, AND NOW WE ARE TRANSITIONING
23 OVER TO THE OTHER PATENT, THE OTHER POWER INTEGRATIONS'
24 PATENT, '908.

01:31:04 25 AND THE ASSERTED CLAIMS OF THE '908 PATENTS ARE CLAIMS 26

01:31:11 1 AND 27. AND JUST TO SUMMARIZE, IT IS MY OPINION THAT THE
2 ACCUSED FAIRCHILD PRODUCTS -- AND THERE IS TWO REPRESENTATIVE
3 PRODUCTS THAT WE'LL BE LOOKING AT --

4 (DOCUMENT DISPLAYED)

01:31:19 5 **A** -- THEY DO NOT INFRINGE THE ASSERTED CLAIMS OF THE '908
6 PATENT.

7 **Q** SO LET'S GO AHEAD AND JUMP INTO THE CLAIM.

8 (DOCUMENT DISPLAYED)

9 **Q** AND WHAT ARE YOU SHOWING ON THIS SLIDE WITH RESPECT TO
01:31:33 10 CLAIM 26?

11 **A** SO WITH CLAIM 26, AGAIN, WE HAVE THE -- THE WORD OF THE
12 CLAIM, AND THE ELEMENTS OF THE CLAIM. AND, WHAT'S HIGHLIGHTED
13 HERE IS THE WORD "CURRENT LIMIT." AND THAT'S SOMETHING THAT
14 WE WILL BE DISCUSSING FURTHER. AND THAT'S A TERM THAT'S BEEN
01:31:52 15 CONSTRUED BY THE COURT.

16 **Q** AND WE'RE NOT SHOWING CLAIM 27 ON THIS SLIDE, BUT WHAT IS
17 YOUR UNDERSTANDING OF CLAIM 27?

18 **A** CLAIM 27 IS SOMETHING THAT'S CALLED "A DEPENDENT CLAIM."
19 AND SO IF YOU WERE TO LOOK AT HOW CLAIM 27 BEGINS -- I DON'T
01:32:07 20 KNOW THE WORDS, EXACTLY, BUT IT IS SOMETHING TO THE EFFECT OF
21 EVERYTHING OF CLAIM 26, AND MORE.

22 SO WHEN YOU THINK ABOUT CLAIM 27, WHICH IS A DEPENDENT
23 CLAIM, YOU ESSENTIALLY WOULD TAKE ALL OF THE LIMITATIONS, THE
24 ELEMENTS OF CLAIM 26, AND THEN ADD IN THE OTHER WORDS THAT'S
01:32:25 25 SHOWN IN CLAIM 27.

01:32:26 1 SO IT'S COMPREHENSIVE OF BOTH, EVERY -- ALL THE
2 LIMITATIONS OF 26, PLUS MORE LIMITATIONS.

3 Q SO, IF SOMETHING'S MISSING FROM CLAIM 26, IS IT ALSO
4 MISSING FROM CLAIM 27?

01:32:37 5 A THAT'S CORRECT.

6 Q SO THEN WE ONLY NEED TO FOCUS ON CLAIM 26?

7 A WE ONLY NEED TO FOCUS ON CLAIM 26, AND JUST EVEN ON ONE
8 ELEMENT IN ORDER TO FIND THAT IT DOES NOT INFRINGE.

9 Q OKAY.

01:32:49 10 (DOCUMENT DISPLAYED)

11 Q CAN YOU TELL US WHAT YOU ARE SHOWING HERE WITH REGARD TO
12 THE COURT'S CLAIM CONSTRUCTION?

13 A SO, YOU NOTICE IN CLAIM 26, THERE IS THAT WORD OR PHRASE
14 "CURRENT LIMIT." AND THE COURT HAS CONSTRUED WHAT THAT WORD
01:33:09 15 OR WHAT "CURRENT LIMIT" MEANS.

16 AND WHAT IT MEANS IS "A VALUE OF CURRENT THAT CAN BE USED
17 BY THE CONTROL CIRCUIT TO TURN OFF THE POWER SWITCH WHEN THE
18 AMOUNT OF CURRENT PASSING THROUGH THE POWER SWITCH REACHES THE
19 THRESHOLD."

01:33:24 20 AND SO THE -- THERE'S SOME HIGHLIGHTING. IT IS THE VALUE
21 OF CURRENT THAT THE COURT HAS EMPHASIZED, I GUESS.

22 Q AND WE HAVE "CURRENT LIMIT" HIGHLIGHTED HERE IN THE CLAIM.
23 YOU HAVE THE COURT'S CLAIM CONSTRUCTION PULLED OUT. IS THAT
24 BECAUSE THIS IS THE CONTESTED CLAIM ELEMENT?

01:33:43 25 A THIS IS THE CONTESTED CLAIM ELEMENT, SO WE ARE FOCUSING ON

01:33:46 1 THIS.

2 Q OKAY. SO WHY, DR. WEI, IS IT YOUR OPINION THAT THE
3 FAIRCHILD PRODUCTS DO NOT INFRINGE THE '908 PATENT?

4 A SO JUST QUICKLY TO SUMMARIZE, IF WE LOOK AT THE FAIRCHILD
01:34:00 5 PRODUCTS, THEY DON'T INFRINGE, BECAUSE THE FAIRCHILD PRODUCTS,
6 WHAT THEY DO IS USE A VALUE OF VOLTAGE AND NOT A VALUE OF
7 CURRENT.

8 AND WE'LL DIG INTO WHAT THAT MEANS. AND, FURTHERMORE,
9 THIS VOLTAGE IS NOT THE SAME AS CURRENT. WE SAW EARLY ON THIS
01:34:14 10 MORNING IN MY TUTORIAL IN MY DESCRIPTION OF "VOLTAGE" AND
11 "CURRENT."

12 Q AND HERE WE ARE SHOWING THE TWO ACCUSED REPRESENTATIVE
13 PRODUCTS FOR THE '908 PATENT.

14 (DOCUMENT DISPLAYED)

01:34:25 15 A THAT'S CORRECT. IT IS SG6841 AND THE FAN6747.

16 (DOCUMENT DISPLAYED)

17 Q SO LET'S TAKE A LOOK AT THE SG6841. WHAT IS YOUR OPINION
18 WITH REGARD TO THAT PRODUCT?

19 A MY OPINION IS THAT THE 6841 DOES NOT HAVE THE CLAIMED
01:34:44 20 "CURRENT LIMIT" ACCORDING TO THE COURT'S CLAIM CONSTRUCTION.
21 AND IF WE LOOK INTO THE DATASHEET, THE SG6841, IT HAS -- IT
22 USES A VALUE OF "VOLTAGE," AND NOT A VALUE OF "CURRENT."

23 AND WE CAN FIND THAT IN AT LEAST ONE SECTION OF THE
24 DATASHEET, THAT "CONSTANT OUTPUT POWER LIMIT" SECTION THAT WE
01:35:04 25 HAVE HEARD ABOUT, WHERE IT SAYS:

01:35:06 1 "WHEN THE SENSE VOLTAGE, ACROSS THE SENSE RESISTOR
2 REACHES THE THRESHOLD VOLTAGE..."

3 AND THEN IT FURTHER GOES ON TO SAY THE SWITCH TURNS OFF.

4 **MS. ONDRICK:** AND, FOR THE RECORD, WE ARE SHOWING DX
01:35:19 5 4683 AT -- THE PAGE 10.

6 **BY MS. ONDRICK:**

7 **Q** NOW, LET'S TURN TO THE SG -- EXCUSE ME -- THE FAN6747.
8 (DOCUMENT DISPLAYED)

9 **Q** WHAT ABOUT THAT PRODUCT, DR. WEI?

01:35:39 10 **A** FOR THE FAN6747, THIS IS ESSENTIALLY THE SAME AS THE 6841
11 WHERE THE FAN6747, IT USES THIS VALUE OF VOLTAGE AND NOT A
12 VALUE OF CURRENT. AND, AGAIN, WE SEE THAT -- A SIMILAR
13 FEATURE IN THE 6747, THAT CONSTANT OUTPUT POWER LIMIT. AND
14 THE LANGUAGE IN HERE WHERE THERE'S A SENSE VOLTAGE AND THE
01:36:02 15 THRESHOLD VOLTAGE, THAT'S ALSO IN THE 6747 AS WE SAW IN THE
16 6841.

17 **MS. ONDRICK:** AND, FOR THE RECORD, THE FAN6747 IS AT
18 DX 3184, AT PAGES -- AT PAGE 13.

19 **BY MS. ONDRICK:**

01:36:19 20 **Q** NOW, WE'VE JUST SEEN TWO EXAMPLES OF PRELITIGATION
21 DOCUMENTS SHOWING NONINFRINGEMENT. IS THAT CORRECT, DR. WEI?

22 **A** THAT'S CORRECT.

23 **Q** IF WE LOOK A LITTLE MORE HERE AT FIGURE 1, WHAT IS IT
24 ABOUT FIGURE 1 THAT LEADS YOU TO BELIEVE WE'RE SEEING A
01:36:40 25 VOLTAGE INSTEAD OF A CURRENT?

01:36:43 1 **A** WELL, IF WE LOOK AT THE SCHEMATIC OF THE TYPICAL
2 APPLICATION, WHAT WE SEE IS THAT THERE IS THE POWER SWITCH --
3 THE POWER SWITCH, RIGHT HERE (INDICATING), WHICH IS EXTERNAL
4 TO THE CONTROLLER CHIP (INDICATING).

01:36:58 5 AND, THERE'S A RESISTOR HERE (INDICATING). AND THAT POWER
6 SWITCH AND RESISTOR ARE ADDED IN BY THE COMPANY, THE CUSTOMER
7 THAT'S BUILDING THE POWER SUPPLY.

8 AND, WHAT THE CONTROLLER CHIP UTILIZES IS A VOLTAGE.

9 **Q** OKAY.

01:37:21 10 SO, DR. WEI, ARE THERE ANY ADVANTAGES TO USING A VOLTAGE
11 IN THIS TYPE OF APPLICATION?

12 **A** SO, WE -- I THINK WE HEARD ABOUT THIS A LITTLE BIT AGO.
13 PERHAPS IT WAS EARLIER THIS WEEK WHEN DR. GARY LIN WAS HERE.
14 AND HE TALKED A LITTLE BIT ABOUT WHY FAIRCHILD UTILIZES A
01:37:40 15 POWER SWITCH ON THE OUTSIDE.

16 AND I THINK, ALSO, MR. W.H. HUANG MENTIONED THIS, AS WELL.

17 WELL, IF YOU HAVE THAT RESISTOR, FOR EXAMPLE, OUTSIDE OF
18 THE CONTROLLER CHIP, THEN -- BECAUSE THE MAIN THING IS THAT
19 RESISTORS, WHEN CURRENT FLOWS THROUGH IT, IT GETS HOT. OKAY?
01:37:57 20 AND SO, BY HAVING IT OUTSIDE IT'S EASIER TO COOL IT. SO THAT
21 IS AN ADVANTAGE.

22 FURTHERMORE, BY HAVING THAT POWER SWITCH EXTERNALLY, THE
23 CUSTOMER CAN CHOOSE WHAT TYPE OF POWER SWITCH TO USE. AND,
24 THERE ARE DIFFERENT RATINGS FOR THESE POWER SWITCHES.

01:38:15 25 YOU CAN GET A 1-AMP POWER SWITCH. YOU CAN GET A 5-AMP

01:38:20 1 POWER SWITCH. AND WHAT THAT TELLS US IS THAT THESE DIFFERENT
2 POWER SWITCHES ARE ALLOWED DIFFERENT MAXIMUM AMOUNTS OF
3 CURRENT TO FLOW THROUGH THEM.

01:38:33 4 AND SO WITH ONE CONTROLLER, THAT ONE CONTROLLER CHIP, YOU
5 CAN TARGET A VARIETY OF DIFFERENT APPLICATIONS. SO YOU CAN
6 TARGET THE REALLY LOW-POWER APPLICATIONS. ALSO YOU CAN TARGET
7 THE HIGHER POWER APPLICATIONS, WITH ONE CONTROLLER CHIP AND BY
8 APPLYING OR UTILIZING DIFFERENT POWER SWITCHES.

01:38:54 9 AND SO AN ADVANTAGE OF THAT IS I CAN SELL TO A WIDER
10 NUMBER OF CUSTOMERS, COMPARED TO IF I HAD THE POWER SWITCH
11 EMBEDDED WITHIN THE CONTROLLER CIRCUIT.

12 Q OKAY. AND SO, THE RESISTOR THAT ALLOWS THIS TO HAPPEN
13 WITH THE SELECTION OF ANY TRANSFORMER THAT YOU WANT AND THE
14 RESISTOR THAT WE ARE SEEING HERE THAT'S CONNECTED TO THE
01:39:14 15 CURRENT SENSE PIN, THAT'S WHAT WE ARE TALKING ABOUT THAT
16 GENERATES THE VOLTAGE, RIGHT THERE?

17 A YES.

18 Q AND WE CAN SEE IT IN THIS DOCUMENT. RIGHT?

19 A YOU CAN SEE IT IN THIS DOCUMENT.

01:39:31 20 Q NOW, DR. WEI, THE '908 PATENT, DOES IT TALK ABOUT CURRENT
21 OR VOLTAGE THROUGH THE SWITCH?

22 A IT TALKS ABOUT A CURRENT THROUGH THE SWITCH. IT -- SO IF
23 WE LOOK AT THE CLAIM CONSTRUCTION, THE COURT'S CLAIM
24 CONSTRUCTION FOR "CURRENT LIMIT," AGAIN IT'S "A VALUE OF
01:39:47 25 CURRENT THAT CAN BE USED BY THE CONTROLLER" -- "BY THE CONTROL

01:39:51 1 CIRCUIT TO TURN OFF THE POWER SWITCH WHEN THE AMOUNT OF
2 CURRENT PASSING THROUGH THE POWER SWITCH REACHES THE
3 THRESHOLD."

01:40:03 4 AND IF WE LOOK IN THE '908 PATENT WE CAN SEE THAT IT USES
5 A VALUE OF CURRENT. THERE'S A SHORT EXCERPT FROM THE
6 SPECIFICATION OF THE '908 PATENT, COLUMN 10. I THINK IT IS
7 LINE 31 TO 32, "WHERE THE CURRENT FLOWING THROUGH THE POWER
8 SWITCH, 147, IS INTERNALLY LIMITED OR CLAMPED TO THE VALUE OF
9 3 AMPS."

01:40:23 10 **Q** AND IF WE LOOK AT THE FAIRCHILD DATASHEETS, WHAT DO THEY
11 SHOW?

12 **A** FOR THE FAIRCHILD DATASHEETS WHAT WE SEE IS THAT THE
13 FAIRCHILD CONTROLLER CIRCUIT USES A VALUE OF VOLTAGE. AND
14 THAT'S ALSO SEEN IN THE -- IN THE TABLES THAT'S FOUND IN THE
01:40:44 15 DATASHEET.

16 YOU SEE THAT THERE IS A TYPICAL 0.825 VOLTAGE. AND
17 THERE'S THESE RANGES THAT'S TYPICAL FOR THESE KINDS OF
18 DATASHEETS.

19 AND THAT'S TRUE FOR BOTH THE 6747 DATASHEET ON PAGE 9, I
01:40:57 20 BELIEVE, AND THE SG6841 DATASHEET AT PAGE 5.

21 **MS. ONDRICK:** AND THOSE ARE DX 3184, FOR THE RECORD,
22 AND DX 4677.

23 (DOCUMENT DISPLAYED)

24 **BY MS. ONDRICK:**

01:41:17 25 **Q** NOW, DR. WEI, DO YOU RECALL DR. KELLEY'S EARLIER TESTIMONY

01:41:20 1 THAT THERE'S REALLY NO DIFFERENCE BETWEEN USING VOLTAGE AND
2 CURRENT?

3 **A** I DO. AND WHAT IS SHOWN ON THE TOP OF THIS PARTICULAR
4 SLIDE ARE TWO SLIDES BORROWED FROM DR. KELLEY WHERE IT
01:41:34 5 SHOWS -- WHAT HE IS TRYING TO SHOW HERE IS THAT IF YOU HAVE A
6 V SENSE VERSUS IVN RELATIONSHIP -- THAT'S ACTUALLY IN THE
7 DATASHEET -- THAT YOU CAN THEN REPLACE THE NUMBERS ON THE Y
8 AXIS WITH CURRENTS INSTEAD OF VOLTAGES.

9 AND WHAT HE'S USING HERE IS APPLYING OHM'S LAW, WHICH, I
01:41:57 10 HAD TALKED ABOUT BEFORE, I EQUALS V OVER R.

11 (REPORTER INTERRUPTION)

12 **THE WITNESS:** I EQUALS V OVER R.

13 **THE COURT REPORTER:** THANK YOU.

14 **THE WITNESS:** BUT, WHAT YOU HAVE TO LOOK AT HERE IS
01:42:15 15 IF YOU LOOK AT THE DATASHEETS FOR, IN THIS CASE, THE 6841,
16 AGAIN WE SEE THAT SENSE RESISTOR, WHICH I'VE BLOWN UP HERE
17 JUST TO MAKE AT BIT MORE VISIBLE.

18 THAT IS CONNECTED TO THE POWER SWITCH, Q1.

19 AND IT IS THE VOLTAGE GOING INTO THE SENSE PIN OF THE
01:42:34 20 CONTROLLER CIRCUIT.

21 **BY MS. ONDRICK:**

22 **Q** WHY IS THAT IMPORTANT TO YOUR ANALYSIS, AGAIN, DR. WEI?

23 **A** WELL, AGAIN, AS I MENTIONED BEFORE, THE CUSTOMER CAN
24 SELECT THE APPROPRIATE POWER SWITCH AND RESISTOR VALUE TO
01:42:48 25 TARGET A WIDE RANGE OF APPLICATIONS.

01:42:49 1 IT'S NOT LIMITED TO JUST A MAXIMUM OF ONE CURRENT OR TWO
2 CURRENTS. IT'S THE CUSTOMER HAS THE OPTION TO UTILIZE THE
3 APPROPRIATE POWER SWITCH FOR THE APPROPRIATE APPLICATION THAT
4 THEY WANT TO BUILD A POWER SUPPLY FOR.

01:43:04 5 **Q** AND SO BECAUSE THE FAIRCHILD PRODUCTS HAVE THIS
6 FLEXIBILITY OF DESIGN, DR. KELLEY'S CONVERSION JUST DOESN'T
7 WORK?

8 **A** YES. IT DOESN'T WORK BECAUSE THE CONTROLLER CIRCUIT, THE
9 FAIRCHILD CONTROLLER CIRCUIT, RELIES ON A VOLTAGE. IT MUST
01:43:19 10 RELY ON A VOLTAGE.

11 (DOCUMENT DISPLAYED)

12 **Q** AND I THINK YOU'RE SHOWING THIS POINT A LITTLE FURTHER
13 HERE WITH THE NEXT SLIDE. WHAT ARE YOU SHOWING HERE?

14 **A** WHAT I'M SHOWING HERE IS, YOU KNOW, IF YOU HAVE DIFFERENT
01:43:33 15 POWER SWITCHES THAT HAVE DIFFERENT CURRENT RATINGS, MAXIMUM
16 CURRENT RATING, THEN YOU HAVE TO CHOOSE THE APPROPRIATE SENSE
17 RESISTOR VALUE IN ORDER TO GET TO THE APPROPRIATE THRESHOLD
18 VOLTAGE LEVEL, AND PROVIDE THAT SENSE VOLTAGE TO THE FAIRCHILD
19 CONTROLLER CIRCUIT.

01:43:54 20 **Q** AND SO IS IT YOUR OPINION THAT THE ASSERTED CLAIMS OF THE
21 '908 PATENT DO NOT LITERALLY INCLUDE A CURRENT LIMIT?

22 **A** THAT'S CORRECT.

23 **Q** AND DO YOU HAVE AN OPINION FOR THIS CLAIM LIMITATION UNDER
24 THE DOCTRINE OF EQUIVALENTS?

01:44:08 25 **A** YES.

01:44:08 1 Q AND WHAT IS THAT OPINION?

2 (DOCUMENT DISPLAYED)

3 A SO THIS OPINION, AS WE CAN SEE -- SO, AGAIN, FOR THE
4 DOCTRINE OF EQUIVALENTS, THERE WAS THAT FUNCTION/WAY/RESULT
01:44:16 5 TEST. THERE'S THE INSUBSTANTIAL DIFFERENCE.

6 AND SO I'M ADDRESSING WHAT DR. KELLEY HAD BROUGHT UP IN
7 TERMS OF THE DOCTRINE OF EQUIVALENTS.

8 AND THIS IS NOT AN INSUBSTANTIAL DIFFERENCE BECAUSE ONE OF
9 ORDINARY SKILL IN THE ART THAT IS LOOKING AT THIS TECHNOLOGY,
01:44:35 10 WOULD KNOW THAT THERE ARE TWO WAYS OF CARRYING OUT THE
11 SWITCHING.

12 YOU CAN USE A VOLTAGE THRESHOLD, OR YOU CAN USE A CURRENT
13 LIMIT. AND, WE SAW THE CURRENT AND VOLTAGE THERE, TWO
14 SEPARATE THINGS.

01:44:49 15 AND SO THERE IS A SUBSTANTIAL DIFFERENCE BETWEEN
16 IMPLEMENTING A VOLTAGE THRESHOLD VERSUS IMPLEMENTING A CURRENT
17 LIMIT, A VALUE OF CURRENT IN THE CONTROLLER CIRCUIT.

18 AND, WE JUST SAW WHY FAIRCHILD CHOSE TO USE A VOLTAGE
19 THRESHOLD, BECAUSE OF THE EXTERNAL POWER SWITCH, AND THAT
01:45:06 20 RESISTOR.

21 AND, I GO ON FURTHER THAT IN THE COURSE OF THE PROSECUTION
22 OR THE EXAMINATION OF THE PATENT WITH -- AT THE PATENT OFFICE,
23 POWER INTEGRATIONS MADE A COMMENT THAT ESSENTIALLY SAYS THERE
24 IS A SUBSTANTIAL DIFFERENCE BETWEEN "VOLTAGE" AND "CURRENT."

01:45:28 25 Q OKAY. WHY DON'T WE GO AHEAD AND TAKE A LOOK AT THAT?

01:45:31 1 **A** OKAY.

2 (DOCUMENT DISPLAYED)

3 **MS. ONDRICK:** AND, FOR THE RECORD, WE ARE SHOWING DX
4 5123. IT'S THE '908 FILE HISTORY FOR THE PARENT PATENT. AND
01:45:45 5 IT'S AT PAGE 30.

6 **THE WITNESS:** SO, THIS IS -- I BELIEVE WHAT THIS IS
7 IS A RESPONSE FROM POWER INTEGRATIONS TO THE PATENT OFFICE.
8 AND IT'S IN REFERENCE TO THIS *AGIMAN* REFERENCE, OR *AGIMAN*
9 PRIOR ART.

01:46:01 10 AND WHAT POWER INTEGRATIONS TOLD THE PATENT OFFICE, AS WE
11 CAN SEE IN THE HIGHLIGHTED PORTION, *AGIMAN*'S CIRCUIT MONITORS
12 VOLTAGE RATHER THAN CURRENT. SO IT IS MAKING THIS DISTINCTION
13 BETWEEN "CURRENT" AND "VOLTAGE." MOREOVER, IF WE KEEP ON
14 READING, *AGIMAN* DESCRIBES A CIRCUIT THAT INCLUDES A COMPARATOR
01:46:22 15 WHICH RECEIVES A SUPPLY MONITORING VOLTAGE AND A THRESHOLD
16 VOLTAGE FOR COMPARISON.

17 AND THEN, FURTHER ON, WHEN WE LOOK AT THE NEXT HIGHLIGHTED
18 PORTION: "*AGIMAN* FAILS TO DISCLOSE" -- THIS IS POWER
19 INTEGRATIONS TELLING THE PATENT OFFICE -- "*AGIMAN* FAILS TO
01:46:38 20 DISCLOSE, TEACH OR FAIRLY SUGGEST A CURRENT INPUT CIRCUIT."

21 SO IT'S MAKING THAT DISTINCTION BETWEEN "VOLTAGE" AND
22 "CURRENT."

23 AND THEN, THE LAST PIECE IS "WHEN THE CURRENT CROSSES A
24 THRESHOLD..."

25

01:46:53 1 **BY MS. ONDRICK:**

2 **Q** SO IT LOOKS LIKE, DR. WEI, POWER INTEGRATIONS AGREES WITH

3 YOUR POSITION THAT "VOLTAGE" AND "CURRENT" ARE DIFFERENT.

4 ISN'T THAT RIGHT?

01:47:01 5 **A** THAT IS RIGHT.

6 (DOCUMENT DISPLAYED)

7 **Q** NOW, IF WE COULD CONTINUE ON TO YOUR NEXT SLIDE, DR. WEI,

8 WHAT ARE YOU SHOWING HERE WITH REGARD TO 'CURRENT' AND

9 "VOLTAGE"?

01:47:13 10 **A** SO HERE I'M TALKING -- IT IS NOW LOOKING AT, AGAIN, THIS

11 NOTION OF DOCTRINE OF EQUIVALENTS, AND, WITH RESPECT TO THAT

12 FUNCTION/WAY/RESULT TEST.

13 AND SO, WHAT I'M STATING HERE IS THAT THE WAY IS NOT THE

14 SAME. CURRENT LIMIT MEANS A VALUE OF CURRENT THAT CAN BE USED

01:47:30 15 BY THE CONTROL CIRCUIT TO TURN OFF THE POWER SWITCH WHEN THE

16 AMOUNT OF CURRENT PASSING THROUGH THE POWER SWITCH REACHES THE

17 THRESHOLD.

18 AND THEN, THE VOLTAGE COMPARATOR IN FAIRCHILD PRODUCTS

19 COMPARED TWO VOLTAGES: THE VOLTAGE AT THE POWER SWITCH -- THE

01:47:47 20 VOLTAGE AT THE SENSE PIN, AND A THRESHOLD VOLTAGE.

21 **Q** SO, IT'S YOUR OPINION THAT A VOLTAGE THRESHOLD IS NOT

22 EQUIVALENT TO A CURRENT LIMIT?

23 **A** THAT'S RIGHT.

24 (DOCUMENT DISPLAYED)

01:48:01 25 **Q** AND IF WE CONTINUE ON, WHAT ARE YOU SHOWING HERE, WITH

01:48:04 1 RESPECT TO THIS SLIDE?

2 **A** ALL I'M SHOWING HERE ARE DIFFERENT KIND OF COMPARATORS
3 THAT YOU SEE IN THE '908 PATENT. THERE'S A VOLTAGE
4 COMPARATOR, SHOWN ON THE LEFT, WITH THAT LABEL 1 IN THE RED
01:48:19 5 CIRCLE.

6 AND THEN, IF YOU LOOK IN FIGURE 4 OF THE '908 PATENT ON
7 THE UPPER -- I BELIEVE IF YOU WERE TO ZOOM OUT THAT IS THE
8 UPPER RIGHT-HAND CORNER. THE CIRCUIT SHOWN THERE ON THE UPPER
9 RIGHT-HAND CORNER -- I THINK IT'S LABELED "317" -- THAT IS A
01:48:34 10 CURRENT COMPARATOR AS DESCRIBED IN THE PATENT.

11 **Q** SO THE PATENT TALKS ABOUT VOLTAGE -- CURRENT COMPARATOR?

12 **A** THE PATENT DESCRIBES A CURRENT COMPARATOR.

13 **Q** AND THE FAIRCHILD PRODUCTS HAVE A VOLTAGE COMPARATOR?

14 **A** THE FAIRCHILD PRODUCTS USE A VOLTAGE COMPARATOR.

01:48:53 15 (DOCUMENT DISPLAYED)

16 **Q** NEXT, I SEE YOU HIGHLIGHTED AND PICKED OUT ONE OF
17 DR. KELLEY'S SLIDES FROM HIS PRESENTATION. WHAT ARE YOU
18 SHOWING HERE?

19 **A** WHAT I'M SHOWING HERE IS THAT THE -- OH, THIS IS FIGURE 4
01:49:10 20 OF THE '908 PATENT. AND I'M JUST POINTING OUT THE DIFFERENT
21 COMPONENTS THAT DR. KELLEY HAD POINTING TO. AND. THERE IS
22 THAT CURRENT SENSE SIGNAL COMING IN. AND THEN, THERE IS A
23 CONTROL CIRCUIT AND A POWER SWITCH.

24 **Q** AND DOES FIGURE 4 SHOW A VOLTAGE COMING INTO THE
01:49:28 25 CONTROLLER?

01:49:30 1 **A** THE -- THE FIGURE DOES NOT SHOW A VOLTAGE COMING INTO THE
2 CONTROLLER.

3 **Q** WHAT DOES IT SHOW COMING INTO THE CONTROLLER?

4 **A** IT IS A -- A CURRENT COMING INTO THE CONTROLLER.

01:49:38 5 **Q** OKAY.

6 **A** THE CONTROLLER CHIP.

7 (DOCUMENT DISPLAYED)

8 **Q** SO IF YOU COULD, DR. WEI, COULD YOU SUMMARIZE YOUR
9 OPINIONS FOR CLAIMS 26 AND 27 OF THE '908 PATENT?

01:49:53 10 **A** SURE. SO, FROM WHAT WE JUST SAW, THAT LIMITATION WITH
11 RESPECT TO THE CURRENT LIMITS, THAT'S NOT MET.

12 AND, THEREFORE, CLAIM 26 -- AND THEN, CLAIM 27, WHICH IS
13 DEPENDENT ON CLAIM 26, ALSO, THAT SAME LIMITATION IS NOT MET.

14 AND, THEREFORE, THE ASSERTED CLAIMS 26 -- OR THE -- THE
01:50:16 15 ACCUSED FAIRCHILD PRODUCTS DO NOT INFRINGE THE CLAIMS 26 AND
16 27 OF THE '908 PATENT.

17 **Q** I HAVE A COUPLE OF QUESTIONS FOR YOU NOW JUST ABOUT SOME
18 OF THE TESTIMONY WE HEARD FROM DR. KELLEY WITH REGARD TO THE
19 '908 PATENT.

01:50:41 20 **A** OKAY.

21 **Q** DID YOU HEAR DR. KELLEY TESTIFY THAT BOTH OF THE
22 REPRESENTATIVE ACCUSED FAIRCHILD PARTS USED A COMPARISON
23 INVOLVING A VALUE REPRESENTATIVE OF A VOLTAGE AS PART OF HIS
24 INFRINGEMENT ANALYSIS?

01:50:59 25 **A** A VALUE REPRESENTATIVE OF A VOLTAGE? I THINK HE WAS

01:51:04 1 TALKING ABOUT --

2 Q A VALUE OF VOLTAGE REPRESENTATIVE OF A CURRENT. I'M
3 SORRY.

4 A RIGHT. SO DR. KELLEY SAID THAT, OH, YOU KNOW, BY HAVING
01:51:12 5 THAT -- USING OHM'S LAW, THERE IS A VALUE OF VOLTAGE THAT IS
6 REPRESENTATIVE OF A CURRENT. I DO.

7 Q OKAY. AND DO YOU THINK THAT THIS IS AN APPROPRIATE
8 ANALYSIS WHEN YOU LOOK AT THE '908 PATENT?

9 A I DON'T, BECAUSE FOR THE VARIOUS REASONS THAT I JUST
01:51:26 10 EXPLAINED, WHEN YOU LOOK AT THE FAIRCHILD PRODUCTS, THE
11 CONTROLLER CHIP THAT IS THE CONTROLLER CHIP, AND IT HAS THAT
12 POWER SWITCH, EXTERNAL, WITH THE SENSE RESISTOR. AND SO WHAT
13 THE CONTROLLER CIRCUIT IS USING IS THE VOLTAGE -- IS A
14 VOLTAGE.

01:51:45 15 Q DID YOU ALSO HEAR DR. KELLEY ADMIT THAT A VOLTAGE
16 COMPARATOR IS DIFFERENT FROM A CURRENT COMPARATOR?

17 A I DO RECALL HEARING THAT. YEAH.

18 Q AND WHAT IS THE IMPORT OF THAT TESTIMONY?

19 A THE IMPORT OF THAT TESTIMONY IS THAT YOU CAN'T JUST SWITCH
01:51:59 20 THEM. YOU CAN'T TAKE OUT A VOLTAGE COMPARATOR AND PUT IN A
21 CURRENT COMPARATOR INSTEAD, OR VICE-VERSA.

22 Q AND, DID YOU HEAR DR. KELLEY TESTIFY THAT THE VOLTAGE HE
23 POINTED TO FOR THE CURRENT LIMIT WAS THE SENSE PIN THAT WE
24 HAVE BEEN TALKING ABOUT HERE WITHIN FAIRCHILD'S PRODUCTS?

01:52:16 25 A YES.

01:52:17 1 Q AND, DOES THAT TESTIMONY ASSIST YOUR OPINIONS IN ANY WAY?

2 A I THINK IT FURTHER BOLSTERS MY OPINION, EVERYTHING THAT I
3 DESCRIBED. WHEN YOU HAVE THE FAIRCHILD CONTROLLER CIRCUIT AND
4 YOU HAVE THE POWER SWITCH, AND THE SENSE RESISTOR, WAS GOING
01:52:32 5 IN -- WHAT THE CONTROLLER CIRCUIT IS USING IS A VOLTAGE -- IS
6 A VALUE OF THE VOLTAGE.

7 Q OKAY. THANK YOU, DR. WEI.

8 NOW, WHAT I WOULD LIKE TO DO IS SHIFT GEARS AND MOVE AWAY
9 FROM NON-INFRINGEMENT. AND LET'S START TALKING ABOUT YOUR
01:52:52 10 OPINIONS WITH REGARD TO THE INVALIDITY OF THE '908 AND '079
11 PATENTS, IF WE COULD.

12 A SURE.

13 (DOCUMENT DISPLAYED)

14 Q DR. WEI, HAVE YOU FORMED ANY OPINIONS ON WHETHER THE
01:53:11 15 ASSERTED CLAIMS OF THE '908 PATENT ARE INVALID IN VIEW OF THE
16 PRIOR ART?

17 A I HAVE. SO WHAT MY OPINION IS THAT WITH RESPECT TO AT
18 LEAST ONE PIECE OF PRIOR ART. SO "PRIOR ART" MEANS THAT THERE
19 IS A PUBLICATION, OR A PATENT THAT WAS AVAILABLE IN THE PUBLIC
01:53:31 20 BEFORE THE '908 PATENT. AND, I THINK BEFORE THE '908 PATENT
21 WAS EVEN FILED.

22 AND WHAT WE CAN DO IS BY LOOKING AT CLAIMS 26 AND 27 AND
23 EACH OF THE ELEMENTS THERE, AND THEN IF YOU LOOK AT ONE OF
24 THESE PRIOR ART REFERENCES, WHAT YOU WILL SEE IS THAT YOU CAN
01:53:52 25 IDENTIFY EACH AND EVERY ONE OF THOSE LIMITATIONS IN THAT PRIOR

ART REFERENCE FOR ALL THE ELEMENTS IN CLAIMS 26 AND 27.

AND, THEREFORE, IT'S MY OPINION THAT CLAIMS 26 AND 27 OF
THE '908 PATENT ARE INVALID.

MS. ONDRICK: YOUR HONOR, MAY I APPROACH?

THE COURT: YES, YOU MAY.

MS. ONDRICK: I HAVE AN INVALIDITY BINDER FOR
DR. WEI.

THE COURT: ALL RIGHT.

BY MS. ONDRICK:

Q SO WHEN YOU CONDUCT AN INVALIDITY ANALYSIS, DR. WEI, CAN
YOU TELL ME WHAT IT IS THAT YOU ARE REQUIRED TO DO?

A SO WHAT I'M REQUIRED TO DO IS LOOK AT THE CLAIMS, LOOK AT
THE ELEMENTS, AND IDENTIFY, IF THERE IS ONE AVAILABLE, A
PRIOR-ART PIECE OF REFERENCE, WHETHER IT'S A PAPER, PATENT.

AND THEN, LOOK TO SEE IF THE -- THAT PATENT OR PAPER DESCRIBES
THE TECHNOLOGY, AND YOU CAN SEE THE LIMITATIONS IN THAT PRIOR
ART.

Q AND WHAT IS YOUR UNDERSTANDING OF THE WAYS TO SHOW
INVALIDITY, DR. WEI?

A SO THE WAYS TO SHOW, IT IS KIND OF LIKE THAT BOWLING
ANALOGY, ONCE AGAIN. ACTUALLY, WE HAD AN EASY TIME TALKING
ABOUT NONINFRINGEMENT FOR THE '079 AND '908 PATENTS.

NOW THAT WE HAVE GONE INTO INVALIDITY, WE HAVE TO IDENTIFY
EACH AND EVERY ELEMENT. SO NOW WE HAVE TO MARCH THROUGH ALL
OF THE ELEMENTS FOR THESE -- FOR ALL THE CLAIMS THAT WE HAVE

01:55:35 1 BEEN TALKING ABOUT.

2 Q AND IF WE DO THAT, WE HAVE TO DO THAT FOR EACH OF THE
3 CLAIMS, CLAIMS 26 --

4 A CLAIMS 26, 27 --

01:55:49 5 Q OKAY.

6 A AND ALL THE ELEMENTS.

7 Q NOW, WHEN YOU CONDUCTED YOUR INVALIDITY ANALYSIS, DID YOU
8 MAKE ANY ASSUMPTIONS?

9 A I DID. SO IN TERMS OF THIS INVALIDITY ANALYSIS, WHAT I
01:56:02 10 ESSENTIALLY ASSUMED WAS DR. KELLEY'S VIEW OF, YOU KNOW, HOW TO
11 CONSTRUE -- HOW TO UNDERSTAND THE CLAIMS. AND, BASICALLY,
12 WHAT IT BOILS DOWN IS, YOU KNOW, WHETHER IT'S A SENSE --
13 WHETHER IT'S A CURRENT OR A VOLTAGE, YOU KNOW, IT DOESN'T
14 REALLY MATTER. AND, THEREFORE, UNDER THAT UNDERSTANDING, I
01:56:25 15 HAVE LOOKED AT THE PRIOR ART TO SEE IF I CAN IDENTIFY EACH AND
16 EVERY ONE OF THESE -- OF THE LIMITATIONS IN THE PRIOR ART.

17 Q OKAY. AND WHEN YOU IDENTIFY EACH AND EVERY LIMITATION IN
18 ONE PIECE OF PRIOR ART, IS THAT SOMETHING CALLED
19 "ANTICIPATION"?

01:56:41 20 A THAT'S CORRECT. SO -- WELL, THERE'S OTHER -- THERE'S
21 DIFFERENT WAYS IN WHICH YOU CAN FIND THAT A PATENT CLAIM IS
22 INVALID.

23 ONE IS ANTICIPATION, WHERE A ESSENTIAL PIECE OF PRIOR ART
24 CONTAINS ALL OF THE LIMITATIONS. BUT IF NOT A SINGLE PIECE OF
01:56:59 25 PRIOR ART CONTAINS ALL THE LIMITATIONS, THERE IS SOMETHING

01:57:02 1 CALLED "OBVIOUSNESS" WHERE YOU CAN TAKE MAYBE TWO PIECES OF
2 PRIOR ART, TWO REFERENCES, AND THEN FIND ALL OF THE PIECES IN
3 THERE.

01:57:11 4 **Q** NOW, I THINK WE HAVE SOME GOOD NEWS FOR THE JURY TODAY. I
5 KNOW YOU HAVE SEVERAL OPINIONS ON INVALIDITY, BUT WE ARE ONLY
6 GOING TO BE OFFERING ONE OF THEM HERE TODAY TO TRY AND
7 STREAMLINE THINGS FOR THE JURY AND THE COURT AND THE PARTIES'
8 TIME.

9 SO CAN YOU PLEASE TELL US THAT, THE POSITION THAT YOU ARE
01:57:25 10 GOING TO BE PRESENTING HERE TODAY?

11 **A** SURE. SO, WE ARE GOING TO FOCUS ON ONE PIECE OF PRIOR
12 ART. AND THAT'S CALLED THE "BARROW PATENT." I'LL JUST REFER
13 TO IT AS "BARROW." AND IT IS MY OPINION THAT BARROW
14 ANTICIPATES CLAIM 26 AND 27 OF THE '908 PATENT.

01:57:42 15 **Q** SO THIS IS WHERE YOU ARE GOING TO BOWL A STRIKE FOR US
16 TODAY, RIGHT?

17 **A** I'M GOING TO BOWL A STRIKE, BUT WE NEED TO MARCH THROUGH
18 EVERYTHING.

19 **Q** OKAY. SO, IF YOU COULD TAKE A LOOK AND JUST TELL US A
01:57:52 20 LITTLE BIT ABOUT THE BARROW PATENT, PLEASE?

21 **A** SURE. THE BARROW PATENT --

22 **MS. ONDRICK:** ONE MOMENT.

23 AND, YOUR HONOR, I OFFER DX5053 INTO EVIDENCE.

24 **THE COURT:** IS THERE AN OBJECTION TO 5053?

01:58:09 25 **MR. POLLACK:** NO OBJECTION, YOUR HONOR.

01:58:10 1 **THE COURT:** ALL RIGHT. DX 5053 MAY BE ADMITTED.

2 (TRIAL EXHIBIT 5053 RECEIVED IN EVIDENCE)

3 **BY MS. ONDRICK:**

4 **Q** IF YOU COULD TELL US A LITTLE BIT ABOUT THE BARROW PATENT,
01:58:28 5 DR. WEI.

6 **A** OF COURSE. SO THE BARROW PATENT IS A PATENT, AND THE
7 TITLE OF THE BARROW PATENT IS "QUICK-START AND OVERVOLTAGE
8 PROTECTION FOR A SWITCHING REGULATOR CIRCUIT."

9 AND I'LL PROVIDE A HIGH-LEVEL OVERVIEW OF WHAT THE
01:58:48 10 UNDERLYING TECHNOLOGY OF THIS PATENT IS JUST TO FAMILIARIZE US
11 WITH IT.

12 BUT A COUPLE OF THINGS TO POINT OUT IS THAT THE FILE DATE
13 FOR THIS PARTICULAR PATENT WAS 1992, AND THEN THE DATE OF THE
14 PATENT ITSELF, WHEN IT CAME OUT, WAS IN 1994.

01:59:03 15 AND SO FROM THOSE DATES WE KNOW THAT THIS IS PRIOR ART TO
16 THE '908 PATENT.

17 **Q** AND SO DOES THE BARROW PATENT PREDATE THE '908 PATENT?

18 **A** YES.

19 **Q** OKAY.

01:59:15 20 AND I SEE THAT THIS PARTICULAR PATENT IS ASSIGNED TO
21 MOTOROLA. IS THAT RIGHT?

22 **A** THAT'S CORRECT.

23 (DOCUMENT DISPLAYED)

24 **Q** NOW, YOU PULLED OUT FIGURE 3 FROM THE BARROW PATENT. CAN
01:59:31 25 YOU JUST USE THIS FIGURE TO DESCRIBE WHAT BARROW DISCLOSES?

01:59:36 1 **A** YES. SO I THOUGHT IT MIGHT BE HELPFUL TO TAKE A STEP
2 BACK, BECAUSE WE HAVE BEEN DIGGING INTO A LOT OF THE
3 TECHNOLOGIES AND FOCUSING ON DIFFERENT PIECES. BUT OFTENTIMES
4 IT IS SOMEWHAT HELPFUL TO TAKE A STEP BACK, LOOK AT WHAT THIS
01:59:49 5 PARTICULAR PRIOR ART REFERENCE IS TALKING ABOUT.

6 AND SO, AGAIN, IF YOU LOOK, THIS PROBABLY LOOKS A BIT
7 FAMILIAR. YOU SEE SIMILAR CIRCUIT ELEMENTS. THERE IS A POWER
8 SWITCH (INDICATING), SHOWN OVER HERE (INDICATING).

9 AND THEN, THERE'S A TRANSFORMER HERE (INDICATING), AND WE
02:00:05 10 HAVE SEEN THAT, AS WELL. THERE IS A DIODE, AND THEN WE SEE
11 THE OUTPUT. OKAY?

12 AND ATTACHED TO THE OUTPUT THERE IS A LOAD (INDICATING).

13 AND IF WE FLIP OVER TO THE LEFT-HAND SIDE, NOTICE THAT
14 THERE IS A VAC, AGAIN, THAT INPUT VOLTAGE WHERE YOU PLUG INTO
02:00:21 15 THE WALL.

16 AND WITHIN THE DOTTED BOX SHOWN HERE (INDICATING), THAT IS
17 A CONTROLLER CIRCUIT. AND SO, WHAT WE SEE HERE IS THAT THE
18 INPUT VOLTAGE GOES THROUGH, AGAIN, WHAT I HAD REFERRED TO
19 BEFORE AS THE "BRIDGE RECTIFIER." COMES IN HERE. THERE'S A
02:00:40 20 NODE, 84 (INDICATING). AND THEN, IT KIND OF SPLITS WHERE
21 THERE IS A PATH GOING DOWN THROUGH RESISTOR 115 (INDICATING),
22 TO RESISTOR 116.

23 AND THEN, THERE'S AN INPUT TO THE CONTROLLER CHIP. AND IT
24 GOES INTO THIS BLOCK CALLED A "MULTIPLIER." AND IT IS PRETTY
02:01:00 25 SIMPLE. A MULTIPLIER BLOCK MULTIPLIES TWO SIGNALS COMING IN,

02:01:03 1 TWO VALUES.

2 AND SO WHAT THIS BARROW PATENT IS DOING IS IT IS TAKING
3 THE SIGNAL FROM HERE, MULTIPLIES IT WITH ANOTHER SIGNAL COMING
4 IN FROM THE RIGHT-HAND SIDE (INDICATING). AND THAT IS
02:01:17 5 CONNECTED TO -- ESSENTIALLY THROUGH OTHER CIRCUITRY,
6 ULTIMATELY TO THE OUTPUT VOLTAGE.

7 AND, IF WE LOOK INSIDE THE CONTROLLER CIRCUIT, WE NOTICE
8 OTHER SQUARES AND TRIANGLES. THEY ARE RIGHT HERE. THERE IS A
9 COMPARATOR 98 (INDICATING). AND WHAT THAT'S -- THAT IS WHAT
02:01:32 10 THE BARROW PATENT DESCRIBES AS THE "UNDER-VOLTAGE LOCKOUT
11 COMPARATOR."

12 THERE'S ANOTHER COMPARATOR, 142, THAT'S REFERRED TO AS THE
13 "OVERVOLTAGE COMPARATOR." THERE'S ANOTHER COMPARATOR, 120.
14 AND THERE'S SOME LOGIC GATES.

02:01:49 15 AND SO IT COULD HAVE A LOT OF THE ELEMENTS AND IT ALSO HAS
16 A LOT OF THE FEATURES AND FUNCTIONS THAT WE HAVE BEEN TALKING
17 ABOUT WITH RESPECT TO THE '908 PATENT.

18 **Q** YOU MENTIONED SOME OF THESE OTHER FUNCTIONALITIES. I SEE
19 HERE AT THIS NODE 84, YOU WENT TO AN UNDERVOLTAGE LOCKOUT
02:02:11 20 COMPARATOR?

21 **A** THAT'S RIGHT.

22 **Q** WHAT IS THE FUNCTION OF THAT?

23 **A** SO THE FUNCTION IS -- SO THERE IS A CONNECTION BETWEEN
24 THIS NODE 84, AND IT GOES THROUGH THIS RESISTOR -- I BELIEVE
02:02:20 25 IT'S 96 (INDICATING). AND THERE'S A CAPACITOR 94. AND THEN,

02:02:28 1 IT ENTERS INTO THE CHIP, INTO THE POSITIVE INPUT TERMINAL OF
2 THE COMPARATOR, 98.

3 AND SO WHAT'S HAPPENING HERE IS THERE'S ONE FUNCTION WHERE
4 IF THE INPUT VOLTAGE IS TOO LOW YOU DON'T WANT THE CHIP TO
02:02:43 5 OPERATE YET. YOU WANT TO WAIT FOR THE INPUT VOLTAGE TO HAVE
6 GOTTEN HIGH ENOUGH FOR THE CIRCUITRY TO OPERATE PROPERLY.

7 AND YOU CAN IMAGINE THAT ONE SCENARIO HERE IS THAT WHEN
8 YOU FIRST PLUG IN, THERE IS NO POWER THAT WAS INITIALLY
9 PROVIDED TO THE CONTROLLER CHIP.

02:02:59 10 AND SO WHEN YOU FIRST PLUG IN, ELECTRICITY FLOWS. THE
11 VOLTAGES START RAMPING UP. AND YOU JUST WANT TO WAIT AND LET
12 THINGS -- KIND OF LIKE WARMING UP YOUR CAR. YOU WANT TO WARM
13 UP YOUR CIRCUIT BEFORE IT TURNS ON AND STARTS TO FUNCTION.

14 **MR. POLLACK:** YOUR HONOR, JUST THE SAME OBJECTION,
02:03:17 15 RULE 26, TO THAT TESTIMONY. I KNOW THERE'S NOT MUCH YOU CAN
16 DO ABOUT IT RIGHT NOW, BUT I HAVE TO STATE IT FOR THE RECORD.
17 THAT I BELIEVE THAT TESTIMONY IS ALL BEYOND THE SCOPE.

18 **THE COURT:** OKAY. AT THE MOMENT I HAVE NO WAY OF
19 RESOLVING THAT. I GUESS WE WILL GO ON.

02:03:35 20 **MR. POLLACK:** I UNDERSTAND, YOUR HONOR. I JUST HAVE
21 TO PRESERVE IT.

22 **THE COURT:** ALL RIGHT. AT SOME POINT, IF YOU WISH TO
23 BE HEARD, IT WILL HAVE TO BE AFTER I HAVE -- I ASSUME YOU
24 DON'T WANT TO INTERRUPT RIGHT NOW. IS THAT RIGHT?

02:03:49 25 **MR. POLLACK:** THAT'S RIGHT, YOUR HONOR. I DON'T WANT

02:03:50 1 TO INTERRUPT THE FLOW. I JUST NEED TO STATE THAT FOR THE
2 RECORD.

3 **THE COURT:** ALL RIGHT. BUT AT SOME POINT IT IS
4 GOING TO HAVE TO BE RESOLVED.

02:03:58 5 **MR. POLLACK:** WE CAN TALK ABOUT IT AT THE END OF THE
6 DAY, YOUR HONOR.

7 **THE COURT:** ALL RIGHT. OKAY, FINE.

8 **MS. ONDRICK:** YOUR HONOR, WE WERE JUST GOING TO WALK
9 THROUGH THE VARIOUS FUNCTIONALITIES SHOWN ON THE FIGURE, AND
02:04:06 10 THEN GET INTO THE INVALIDITY ANALYSIS. SO THIS WAS ALL JUST
11 BACKGROUND.

12 **THE COURT:** OKAY.

13 **MS. ONDRICK:** OKAY?

14 **THE COURT:** WE HAVE HAD OBJECTIONS --

02:04:13 15 **MS. ONDRICK:** BUT WE CAN MOVE ON IF -- IF WE DON'T
16 NEED IT FOR BACKGROUND, I GUESS.

17 **THE COURT:** I'LL LEAVE THAT TO YOU. I DON'T KNOW
18 WHETHER THIS OBJECTION IS WELL-TAKEN OR NOT. IT'S MADE. I'LL
19 ADDRESS IT AT AN APPROPRIATE TIME WHEN WE WON'T BE
02:04:27 20 INTERRUPTING THE JURY, WHICH IS THE SUGGESTION OF MR. POLLACK.

21 **MS. ONDRICK:** NO PROBLEM, YOUR HONOR.

22 **THE COURT:** SO KEEP GOING, HOWEVER YOU LIKE.

23 (DOCUMENT DISPLAYED)

24 **BY MS. ONDRICK:**

02:04:38 25 **Q** SO, DR. WEI, WHY DON'T WE START OUR WALK-THROUGH OF THE

02:04:41 1 CLAIMS WITH THE BARROW PATENT?

2 **A** OKAY.

3 **Q** WHAT ARE YOU SHOWING HERE? I SEE YOU HAVE CALLED OUT
4 COLUMN 1, LINES 58 TO 63 OF BARROW.

02:04:50 5 **A** SO WHAT I'VE CALLED OUT HERE IS A SECTION OF THE PATENT
6 SPECIFICATION CALLED "THE SUMMARY OF THE INVENTION."

7 AND JUST TALKING ABOUT, IN SUMMARY, HERE'S WHAT THIS
8 INVENTION OF BARROW IS ABOUT.

9 AND WHAT'S SHOWN ON TOP IS FOR CLAIM 26. THIS IS ACTUALLY
02:05:04 10 CALLED THE "PREAMBLE," YOU KNOW, THE BEGINNING OF THE CLAIM.
11 AND IT SAYS:

12 "A POWER SUPPLY CONTROLLER CIRCUIT COMPRISING."

13 (DOCUMENT DISPLAYED)

14 **A** AND THEN, I'M JUST POINTING OUT THAT THE BARROW IS RELATED
02:05:15 15 TO A POWER CONVERTER, SO THERE IS A POWER SUPPLY CONTROLLER
16 CIRCUIT IN THERE.

17 **Q** SO CAN WE GO AHEAD AND CHECK THE BOX AND SAY THAT BARROW
18 DISCLOSES THE POWER SUPPLY CONTROLLER?

19 **A** YES.

02:05:27 20 **Q** LET'S GO TO THE MULTI-FUNCTION CIRCUIT ELEMENT.

21 **A** OKAY.

22 (DOCUMENT DISPLAYED)

23 **Q** CAN YOU REMIND US OF THE COURT'S CLAIM CONSTRUCTION?

24 **A** YES. SO IN TERMS OF THE MULTI-FUNCTION CIRCUIT WITHIN
02:05:39 25 THIS ELEMENT, THERE'S A COURT'S CLAIM CONSTRUCTION. AND, THE

02:05:43 1 CONSTRUCTION IS:

2 "A CIRCUIT WITHIN A POWER SUPPLY CONTROLLER CIRCUIT"

3 THAT IS DESCRIBED IN BARROW -- "THAT IS CAPABLE OF

4 PERFORMING AT LEAST THE FUNCTION OF GENERATING A

02:05:54 5 CURRENT LIMIT ADJUSTMENT SIGNAL BASED ON A SIGNAL

6 FROM A MULTI-FUNCTION TERMINAL THAT IS ELECTRONICALLY

7 COUPLED TO IT."

8 SO THERE IS ACTUALLY A BUNCH OF PIECES THAT WE WOULD HAVE

9 TO IDENTIFY TO APPLY THE COURT'S CLAIM CONSTRUCTION, IN

02:06:12 10 ADDITION TO THE REST OF THIS CLAIM ELEMENT

11 **Q** HAVE YOU APPLIED THE COURT'S CONSTRUCTION IN FORMULATING
12 YOUR INVALIDITY OPINIONS?

13 **A** YES, I HAVE.

14 **Q** OKAY. AND SO I SEE WE HAVE ANOTHER CLAIM CONSTRUCTION YOU
02:06:26 15 ARE IDENTIFYING.

16 (DOCUMENT DISPLAYED)

17 **A** THERE IS ONE MORE CLAIM CONSTRUCTION WITH RESPECT TO

18 "MULTI-FUNCTION TERMINAL," WHICH IS DIFFERENT FROM

19 "MULTI-FUNCTION CIRCUIT."

02:06:33 20 AND THE MULTI-FUNCTION TERMINAL IS AN ELECTRICAL NODE --

21 WELL, IS (AS READ):

22 "AN ELECTRICAL NODE THAT CAN BE CONFIGURED AND

23 INTERCONNECTED BETWEEN COMPONENTS OF THE POWER SUPPLY

24 CIRCUIT..."

02:06:48 25 SO THERE'S DIFFERENT, I WOULD IMAGINE THERE --

02:06:51 1 "...COMPONENTS OF A POWER SUPPLY CIRCUIT SO AS TO
2 ENABLE AN ELECTRICAL SIGNAL TO FLOW INTO AND OUT OF
3 THOSE COMPONENTS TO OTHER COMPONENTS."

4 THERE'S COMPONENTS, ELECTRICITY FLOWS.

02:07:09 5 Q AND HAVE YOU APPLIED THE COURT'S CLAIM CONSTRUCTION IN
6 YOUR ANALYSIS, DR. WEI?

7 (REPORTER INTERRUPTION)

8 BY MS. ONDRICK:

9 Q AND HAVE YOU APPLIED THE COURT'S CLAIM CONSTRUCTION IN
02:07:12 10 YOUR ANALYSIS, DR. WEI?

11 A YES, I HAVE.

12 Q OKAY. AND WE HAVE ONE MORE.

13 (DOCUMENT DISPLAYED)

14 A WELL, THIS ONE'S A LITTLE BIT SHORTER. AND IT'S ACTUALLY
02:07:21 15 WITH RESPECT TO THE TERM "COUPLED." AND THIS IS AN
16 AGREED-UPON CONSTRUCTION BETWEEN THE TWO PARTIES.

17 SO, BETWEEN FAIRCHILD AND POWER INTEGRATIONS, THE TWO
18 PARTIES HAVE AGREED THAT THE "COUPLED" MEANS "A DIRECT OR
19 INDIRECT CONNECTION EXISTS IN ORDER TO BE ABLE TO PERFORM
02:07:43 20 SPECIFIC ACTIVITIES OR ACTIONS."

21 SO, KIND OF AN EXPANDED DESCRIPTION OF THE WORD "COUPLED."

22 Q AND HAVE YOU APPLIED THAT AGREED-UPON CONSTRUCTION?

23 A YES, I HAVE.

24 Q OKAY.

02:07:56 25 (DOCUMENT DISPLAYED)

02:07:57 1 **Q** SO WHY DON'T WE GET INTO THIS CLAIM ELEMENT AND START WITH
2 THE "MULTI-FUNCTION TERMINAL" PIECE, IF WE COULD?

3 **A** WHAT WE ARE GOING TO DO IS BREAK UP THIS ELEMENT.
4 ALTHOUGH IT'S ONE ELEMENT, THERE IS MANY PIECES TO IT. SO WE
02:08:10 5 WILL TAKE IT ONE PIECE AT A TIME TO MAKE IT EASIER TO FOLLOW.

6 SO WE WILL FOCUS FIRST ON THE "MULTI-FUNCTION TERMINAL."
7 AND JUST FOR CONVENIENCE, THE COURT'S CLAIM CONSTRUCTION IS
8 ALSO ADDED HERE ON THIS CHART.

9 BUT WHAT I'M IDENTIFYING IS NODE 84 THAT'S SHOWN ON FIGURE
02:08:31 10 3 OF THE BARROW PATENTS. THAT IS WHAT I'M IDENTIFYING AS THE
11 MULTI-FUNCTION TERMINAL.

12 AND IF WE GO INTO THE SPECIFICATION OF BARROW -- SO IF WE
13 GO TO COLUMN 4, LINES 32 TO 47, IF WE LOOK AT WHAT'S
14 HIGHLIGHTED HERE, THERE IS AN INPUT VOLTAGE V_{AC} , RIGHT HERE
02:08:55 15 (INDICATING), OPERATING AT 120 -- OPERATING AT $120V_{AC}$ IS
16 APPLIED ACROSS FULL-WAVE RECTIFIER 82. THAT IS THE CIRCUITRY
17 RIGHT HERE, (INDICATING) AND PRODUCES A 120 HERTZ HAVERSINE
18 WAVEFORM.

19 AND WHAT THAT BASICALLY MEANS, WITHOUT BORING YOU TO
02:09:18 20 DEATH, IS A SINUSOIDAL WAVEFORM. AND THEN, THE BRIDGE
21 RECTIFIER, WHAT IT DOES IS IT GIVES YOU KIND OF THE MAGNITUDE.
22 SO IT KIND OF GIVES YOU THIS FUNNY LOOKING SHAPE, BY FLIPPING
23 THE NEGATIVE VOLTAGES OVER TO THE POSITIVE SIDE.

24 SO THAT IS WHAT A HAVERSINE IS. AND ALL THAT IS HAPPENING
02:09:37 25 AND BEING APPLIED TO NODE 84. AND THAT IS WHAT I'VE

02:09:40 1 IDENTIFIED AS THE "MULTI-FUNCTION TERMINAL."

2 Q SO NODE 84 IS THE MULTI-FUNCTION TERMINAL?

3 A CORRECT.

4 Q LET'S CONTINUE ON TO YOUR NEXT SLIDE.

02:09:50 5 (DOCUMENT DISPLAYED)

6 Q WHAT YOU ARE CONVEYING HERE, DR. WEI?

7 A THEN, I'M CONVEYING THAT AS NODE 84 IS DESCRIBED IN THE
8 PATENTS IN COLUMN 5, LINES 5 THROUGH 14 IS THE WAVEFORM AT
9 NODE 84 IS DIVIDED DOWN BY RESISTOR 115 AND 116.

02:10:07 10 SO I'M JUST DESCRIBING -- I'M SHOWING THE PATH HERE AS
11 DESCRIBED IN THE PATENT. AND IT'S GOING TO COME -- IT'S
12 COMING INTO A TERMINAL THAT IS GOING TO THE MULTIPLIER BLOCK
13 THAT WE HAD DISCUSSED A LITTLE BIT BEFORE. AND THEN WE WILL
14 STEP THROUGH OTHER ASPECTS OF THIS.

02:10:27 15 Q AND IS THE PATH YOU JUST IDENTIFIED FROM NODE 84 DOWN INTO
16 THE MULTIPLIER 112?

17 A THAT'S CORRECT.

18 (DOCUMENT DISPLAYED)

02:10:41 19 Q NOW, LET'S TALK ABOUT THE MULTI-FUNCTION CIRCUIT AND WHERE
20 YOU CAN FIND THAT IN BARROW.

21 A SO, WHAT WE SEE FROM THE ELEMENT, THE CLAIM ELEMENT, IT
22 SAYS: "A MULTI-FUNCTION CIRCUIT" -- OF COURSE, THERE'S THAT
23 COURT'S CLAIM CONSTRUCTION. AND THAT MULTI-FUNCTION CIRCUIT
24 IS COUPLED TO RECEIVE A SIGNAL AT A MULTI-FUNCTION TERMINAL?

02:11:00 25 AND SO WHAT I'M SHOWING HERE IS THAT THERE IS A

02:11:03 1 MULTI-FUNCTION CIRCUIT, AND IT'S COUPLED, YOU KNOW, THROUGH
2 THE BLUE ARROWS HERE. AND THE MULTI-FUNCTION CIRCUIT
3 COMPRISES THAT MULTIPLIER, 112. AND THERE'S ALSO A
4 COMPARATOR -- I THINK THAT'S AN AMPLIFIER, 140.

02:11:22 5 **Q** CAN YOU REMIND US AGAIN WHAT THAT MULTIPLIER IS?

6 **A** IN THAT MULTIPLIER, WHAT IT IS DOING IS TAKING A VOLTAGE
7 THAT IS -- IT'S LOOKING AT A REDUCED, A SMALLER VERSION OF THE
8 INPUT VOLTAGE. AND IT IS MULTIPLYING IT WITH A VALUE COMING
9 IN FROM THE RIGHT. AND THAT VALUE COMING IN FROM THE RIGHT IS
02:11:43 10 ACTUALLY COMING THROUGH AN AMPLIFIER, WHICH THEN HAS AN INPUT
11 THAT IS CONNECTED ULTIMATELY TO THE OUTPUT.

12 SO IT IS TAKING INFORMATION FROM THE INPUT VOLTAGE. IT IS
13 TAKING INFORMATION FROM THE OUTPUT VOLTAGE, MULTIPLYING IT AND
14 THEN DOING SOME ACTIVITY.

02:11:59 15 (DOCUMENT DISPLAYED)

16 **Q** AND ARE YOU ALSO ABLE TO FIND A CURRENT LIMIT ADJUSTMENT
17 SIGNAL IN BARROW?

18 **A** YES. SO, THE CURRENT LIMIT ADJUSTMENT SIGNAL IS THE
19 SIGNAL THAT COMES FROM THE OUTPUT OF THE MULTIPLIER

02:12:17 20 (INDICATING), AND IT GOES UP INTO A COMPARATOR 120, OVER HERE
21 (INDICATING).

22 AND WHAT IT'S DOING IS IT'S COMPARING THAT SIGNAL COMING
23 HERE, AND IT'S COMPARING IT TO A SIGNAL THAT I'VE TRACED OUT
24 HERE IN RED. AND, AGAIN, THIS IS VERY SIMILAR. WHAT WE CAN

02:12:34 25 SEE IS THERE'S A POWER SWITCH. THERE IS A RESISTOR. AND IT'S

02:12:38 1 TAKING THE SIGNAL AND IT IS COMPARING THOSE TWO.

2 Q AND CAN YOU EXPLAIN FOR US HOW BARROW IS ADJUSTING THE
3 CURRENT LIMIT OF THE POWER SWITCH?

4 A SO THE WAY IT ADJUSTS THE CURRENT LIMITS OF THE POWER
02:12:52 5 SWITCH IS NOTICE THAT THE OUTPUT OF THIS COMPARATOR, 120, GOES
6 INTO THIS PAIR OF NOR GATES.

7 AND IT IS GOING -- WITHOUT GOING INTO TOO MUCH DETAIL, IT,
8 IS THIS LATCH. AND THROUGH THE FUNCTION OF THE CIRCUITRY, IT
9 TURNS OFF THAT POWER SWITCH OF 126.

02:13:11 10 Q AND WE'RE GOING TO GET INTO THAT IN A LITTLE MORE DETAIL
11 WITH ELEMENT B, CORRECT?

12 A THAT'S CORRECT.

13 Q OKAY.

14 (DOCUMENT DISPLAYED)

02:13:20 15 Q SO CAN WE GO AHEAD AND CHECK OFF THAT BARROW INCLUDES
16 CLAIM ELEMENT A, THE MULTI-FUNCTION CIRCUIT?

17 A YES, WE CAN.

18 Q SO LET'S LOOK AT YOUR ANALYSIS FOR THE CONTROL CIRCUIT
19 LIMITATION OF CLAIM 26.

02:13:35 20 A OKAY.

21 (DOCUMENT DISPLAYED)

22 Q I SEE YOU USED THE COURT'S CLAIM CONSTRUCTION. CAN YOU
23 PLEASE EXPLAIN THAT TO US AGAIN?

24 A SURE. SO, AGAIN, THERE IS A CONSTRUCTION FOR "CONTROL
02:13:45 25 CIRCUIT" WITH RESPECT TO THIS CLAIM. AND IT IS CONSTRUED AS

02:13:50 1 "A CIRCUIT THAT CONTROLS THE POWER SWITCH," ESSENTIALLY, "BY
2 GENERATING A WAVEFORM WHICH IS RESPONSIVE TO ELECTRICAL
3 SIGNALS GENERATED WITHIN THE POWER SUPPLY CONTROLLER CIRCUIT."

4 Q AND HAVE YOU APPLIED THAT CONSTRUCTION IN YOUR ANALYSIS,
02:14:07 5 SIR?

6 A YES, I HAVE.

7 Q OKAY.

8 (DOCUMENT DISPLAYED)

9 Q CAN YOU PLEASE TELL US HOW YOU WERE ABLE TO IDENTIFY THE
02:14:16 10 CONTROL CIRCUIT IN THE BARROW PRIOR ART REFERENCE?

11 A I HAVE. SO, THE CONTROL CIRCUIT IS THE CIRCUIT THAT --
12 THE CIRCUITRY THAT I'VE OUTLINED HERE IN RED (INDICATING).

13 AND WHAT WE CAN SEE IS THAT, FOR EXAMPLE, THE OUTPUT OF
14 THIS RED BOX HAS A BLUE ARROW GOING TO THE RIGHT. AND IT'S
02:14:39 15 CONNECTED TO THIS SWITCH. AND, IT'S THIS LINE THAT TURNS THE
16 SWITCH ON AND OFF (INDICATING).

17 Q AND SO, IF WE SEE, IF YOU COULD JUST DESCRIBE FOR US
18 THE -- THE COMPONENTS ACTUALLY MAKING UP THE CONTROL CIRCUIT
19 FOR US.

02:14:58 20 A SURE. SO, THE CONTROL CIRCUIT THAT IS IN THE OUTLINED RED
21 BOX, THAT CIRCUIT CONSISTS OF COMPARATOR 120, 142.

22 THERE'S A BLOCK CALLED "REFERENCE GENERATOR."

23 THERE'S A BUFFER, 125, OR A GATE DRIVER. AND THEN,

24 THERE'S A DELAY CIRCUIT, 154. THERE'S -- AND THEN THERE'S A
02:15:26 25 PAIR OF WHAT ARE CALLED "NOR GATES" THAT IMPLEMENT THIS LATCH

02:15:30 1 FUNCTION.

2 AND SO, ALL THOSE CIRCUITS CONSTITUTE THE CONTROL CIRCUIT.

3 Q AND I'M NOT SURE IF YOU SAID IT OR NOT, BUT DOES IT ALSO

4 INCLUDE COMPARATOR 152?

02:15:42 5 A I MAY HAVE MISSED IT. IT DOES INCLUDE 152.

6 Q AND I SEE YOU ALSO CALLED OUT SOME LANGUAGE FROM THE

7 BARROW PATENT AT COLUMN 5, LINES 27 TO 35. WHAT ARE YOU

8 SHOWING THERE?

9 A WELL, IF WE LOOK AT THE LANGUAGE THERE, THAT'S FOUND IN

02:16:00 10 THE PATENT, IT SAYS (AS READ):

11 "THE OUTPUT OF MULTIPLIER 112..."

12 WHICH IS THE BOX THAT WE HAVE BEEN TALKING ABOUT SHADED IN

13 ORANGE.

14 "...RANGES FROM 0 TO 1.5 VOLTS..."

02:16:14 15 SO THAT'S KIND OF THE RANGE OF THE VOLTAGE COMING OUT.

16 AND IT'S GOING INTO THE INVERTING INPUT OF CURRENT SENSE

17 COMPARATOR 120, RIGHT THERE (INDICATING).

18 AND THEN, IF WE LOOK AT THE OTHER INPUT TO THIS COMPARATOR

19 120, WE NOTICE THAT IT COMES BACK THROUGH TO THIS RESISTOR AND

02:16:33 20 POWER SWITCH (INDICATING). AND SO, THAT IS IMPLEMENTING THE

21 CURRENT LIMIT.

22 Q AND WHAT ARE YOU INTENDING TO SHOW HERE WITHIN THAT SLIDE,

23 DR. WEI?

24 A I THINK I MAY HAVE JUMPED THE GUN A LITTLE BIT BEFORE, BUT

02:16:47 25 ALL I'M TRYING TO SHOW HERE IS THAT THE CONTROLLER CIRCUIT

02:16:51 1 TURNS THIS POWER SWITCH ON AND OFF.

2 Q OKAY. LET'S MOVE TO THE CURRENT LIMIT REQUIREMENT IN
3 ELEMENT B. WHAT ARE YOU SHOWING HERE? YOU CALLED OUT COLUMN
4 5, LINES 27 TO 48.

02:17:08 5 (DOCUMENT DISPLAYED)

6 A YES, SO, WITH RESPECT TO THIS, IF WE LOOK AT THE PORTION
7 OF THE BARROW PATENT, COLUMN 5, 27, OR ACTUALLY KIND OF
8 FURTHER DOWN, "WHEN THE VOLTAGE ACROSS RESISTOR 128 EXCEEDS
9 THE OUTPUT SIGNAL OF MULTIPLIER 112, THE OUTPUT OF COMPARATOR
02:17:29 10 120 GOES HIGH TO RESET LATCHING NOR GATES, 122 AND 124, AND
11 TURN OFF TRANSISTOR 126."

12 Q OKAY. AND SO, WERE YOU ABLE TO FIND ALL OF THE
13 REQUIREMENTS OF ELEMENT B IN THE BARROW PATENT?

14 A I HAVE.

02:17:46 15 Q OKAY.

16 (DOCUMENT DISPLAYED)

17 Q CAN WE GO AHEAD AND CHECK THAT OFF.

18 A LET'S CHECK THAT OFF.

19 Q OKAY. NOW, BECAUSE WE ARE DOING INVALIDITY WE ARE GOING
02:17:55 20 TO NEED TO TAKE A LOOK AT CLAIM 27, AS WELL. IS THAT RIGHT?

21 A THAT'S CORRECT.

22 Q OKAY.

23 (DOCUMENT DISPLAYED)

24 Q AND CAN YOU TELL US WHAT YOU FOUND IN BARROW WITH RESPECT
02:18:04 25 TO CLAIM 27?

02:18:05 1 **A** SURE. SO, RECALL THAT CLAIM 27 IS A DEPENDENT CLAIM FROM
2 26. AND SO, THE HIGHLIGHTED PORTION "WHEREIN THE CONTROL
3 CIRCUIT IS FURTHER COUPLED TO AN OUTPUT OF A POWER SUPPLY
4 THROUGH A CONTROL TERMINAL OF THE POWER SUPPLY CONTROLLER
02:18:22 5 CIRCUIT."

6 AND SO WHAT I'VE SHOWN HERE IN FIGURE 3 OF BARROW, WHAT WE
7 NOTICE IS THAT THERE'S THAT OUTPUT OF THE POWER SUPPLY, V OUT
8 THAT IS CONNECTED TO A LOAD. AND THEN, WE CAN FURTHER --
9 THERE IS A RESISTOR DIVIDER THAT TAKES A -- THAT PROVIDES A
02:18:43 10 VOLTAGE HERE THAT COMES ACROSS.

11 AND IF WE TRACE OUT THE BLUE ARROWS, IT GOES INTO THIS
12 COMPARATOR, 142. AND THEN, IF WE WERE TO FURTHER TRACE THAT
13 OUT, IT GOES INTO THIS PAIR OF NOR GATES THAT IMPLEMENT THE
14 LATCHING.

02:18:57 15 AND, FINALLY, IT COMES BACK AROUND AGAIN TO POWER SWITCH.
16 AND SO, THE SWITCHING OF THE POWER SWITCH IS INFLUENCED BY
17 WHAT'S GOING ON AT THE OUTPUT OF THIS POWER CONVERTER.

18 **Q** AND I THINK YOU MAY HAVE GOT US THERE ALREADY, DR. WEI.
19 (DOCUMENT DISPLAYED)

02:19:19 20 **Q** BUT I THINK YOUR NEXT SLIDE IS INTENDED TO GET TO THAT
21 LAST PIECE, TOO. CORRECT?

22 **A** THAT IS CORRECT. I MAY HAVE JUMPED THE GUN A LITTLE BIT
23 TO TRY TO EXPLAIN THINGS IN ONE FLOW.

24 **Q** I THINK WE ALL APPRECIATE THAT, DR. WEI. NO PROBLEM.

02:19:33 25 SO WERE YOU ABLE TO FIND ALL OF THE REQUIREMENTS OF CLAIM

02:19:37 1 27 IN THE BARROW PATENT?

2 **A** I HAVE.

3 (DOCUMENT DISPLAYED)

4 **Q** AND CAN WE CHECK THAT BOX OFF?

02:19:43 5 **A** WE CAN CHECK THAT BOX OFF.

6 **Q** SO COULD YOU JUST SUMMARIZE YOUR OPINION WITH REGARD TO
7 THE '908 PATENTS AND BARROW?

8 **A** SURE. SO WHAT WE HAVE JUST DONE IS LOOKED AT THE ELEMENTS
9 OF CLAIM 26 AND CLAIM 27. AND WE WERE ABLE TO IDENTIFY ALL
02:19:57 10 THE LIMITATIONS FOR CLAIM 26 AND 27 IN BARROW.

11 AND JUST TO REFRESH OUR MEMORY A LITTLE BIT, WITH RESPECT
12 TO INVALIDITY, I WAS ASSUMING DR. KELLEY'S POSITIONS,
13 INTERPRETATIONS IN TERMS OF "VOLTAGE" AND "CURRENT" AND
14 THEY'RE INTERCHANGEABLE.

02:20:16 15 AND SO ALL OF THE LIMITATIONS HAVE BEEN FOUND IN BARROW
16 FOR CLAIMS 26 AND 27. AND, THEREFORE, IT IS MY OPINION THAT
17 BARROW ANTICIPATES THE CLAIMS 26 AND 27 OF THE '908 PATENT.
18 AND IT ANTICIPATES BECAUSE WE HAVE JUST BEEN LOOKING AT ONE
19 REFERENCE, THE SINGLE BARROW REFERENCE.

02:20:36 20 **Q** THANK YOU, DR. WEI. SO NOW LET'S TRANSITION TO THE '079
21 PATENT AND YOUR OPINIONS THERE, IF WE COULD.

22 (DOCUMENT DISPLAYED)

23 **A** SO THE '079 PATENT, I DON'T KNOW IF YOU REMEMBER, THERE
24 WERE MANY MORE ELEMENTS. SO, THE '908 WAS ACTUALLY RELATIVELY
02:20:54 25 STRAIGHTFORWARD.

02:20:55 1 THE ASSERTED CLAIMS OF THE '079 ARE CLAIMS 31, 34, 38 AND
2 42, SO THERE'S A LOT OF GROUND TO COVER.

3 HOPEFULLY, WE CAN COVER THEM RELATIVELY QUICKLY, BECAUSE
4 AS I'LL EXPLAIN, THERE ARE CERTAIN ELEMENTS THAT I UNDERSTAND
02:21:17 5 ARE CONTESTED. AND THEN, THERE ARE OTHER ELEMENTS THAT REALLY
6 AREN'T CONTESTED. AND SO THOSE WE CAN GO THROUGH RELATIVELY
7 QUICKLY AND REALLY FOCUS ON THE ONES THAT ARE CONTESTED.

8 AND AS FAR AS THE '079 PATENT IS CONCERNED, WHAT WE CAN
9 SEE IS THAT THE FILE DATE WAS JUNE 30, 2000 -- OH, NO. OH,
02:21:37 10 YEAH. IS -- I'LL JUST STOP THERE. THAT'S FINE.

11 **Q** SO, LET ME JUST ASK YOU THIS, DR. WEI: HAVE YOU FORMED
12 ANY OPINIONS ON WHETHER THE ASSERTED CLAIMS OF THE '079 PATENT
13 ARE INVALID?

14 **A** YES. GETTING AHEAD OF MYSELF.

02:21:53 15 **Q** NO PROBLEM.

16 **A** AS WE WILL SEE, THE ASSERTED CLAIMS, 31, 34, 38 AND 42,
17 ARE INVALID, ARE ANTICIPATED BY A PRIOR ART REFERENCE THAT WE
18 WILL BE TALKING ABOUT.

19 **Q** SO AS WITH THE PRIOR PATENT ARE WE JUST GOING TO BE
02:22:12 20 PRESENTING ONE OF YOUR INVALIDITY OPINIONS HERE TODAY?

21 **A** YES, JUST FOCUSING ON ONE. THERE IS MULTIPLE, BUT WE WILL
22 JUST LOOK AT ONE OF THEM.

23 **Q** FOR THE SAKE OF TIME AND EFFICIENCY WE WILL PROCEED WITH
24 JUST ONE REFERENCE, THEN.

02:22:24 25 **A** AND MAYBE MY VOICE, AS WELL.

02:22:25 1 Q DO YOU NEED SOME WATER?

2 A I'M FINE. THANK YOU.

3 Q OKAY. LET'S GO TO YOUR NEXT SLIDE.

4 (DOCUMENT DISPLAYED)

02:22:32 5 Q AND I SEE YOU CALLED OUT THE ABSTRACT OF THE '079 PATENT.
6 WHAT IS YOUR PURPOSE IN DOING THAT?

7 A AGAIN, I DON'T KNOW. YOU MIGHT HAVE NOTICED THIS. I LIKE
8 TO KIND OF TAKE A STEP BACK, KIND OF REFRESH OUR MEMORY IN
9 TERMS OF WHAT WE'VE BEEN TALKING ABOUT. BECAUSE WE HAVE SPENT
02:22:45 10 A LOT OF TIME TALKING ABOUT '908, AND THEN ALL OF A SUDDEN WE
11 ARE SWITCHING BACK TO '079.

12 SO THAT IS KIND OF DO A LITTLE CONTEXT SWITCH. WHAT IS
13 '079?

14 AND SO, WHAT I THOUGHT I WOULD DO IS JUST BRING UP THE
02:22:56 15 ABSTRACT. IT HAD A SUMMARY, IN SOME SENSE, OF WHAT THE '079
16 PATENT IS ALL ABOUT. AND IF WE JUST LOOK AT THE FIRST
17 SENTENCE, IT SAYS:

18 "A SWITCHING REGULATOR THAT OPERATES AT A FREQUENCY
19 FOR A FIRST RANGE OF FEEDBACK SIGNAL VALUES AND A
02:23:16 20 VARIABLE FREQUENCY WITHOUT SKIPPING CYCLES FOR A
21 SECOND RANGE OF FEEDBACK SIGNAL VALUES."

22 AND SO, WHAT WE CAN READ FROM THAT IS THAT, YOU KNOW, THIS
23 IS KIND OF WHAT THE INVENTOR'S THOUGHT WAS, YOU KNOW, THE MAIN
24 INVENTION OF THIS PARTICULAR PATENT.

02:23:32 25 Q OKAY.

02:23:33 1 **A** SO, AGAIN, WE ARE BACK TO THAT FIXED AND VARIABLE
2 FREQUENCY.

3 (DOCUMENT DISPLAYED)

4 **Q** NOW, IF WE TURN TO CLAIM 34, I SEE YOU HAVE DRAWN SOME
02:23:44 5 GREEN AND RED BOXES AROUND THE CLAIM ELEMENT. WHAT IS YOUR
6 PURPOSE IN DOING THAT?

7 **A** SURE. SO, IN TERMS OF THE PRIOR ART REFERENCE THAT WE ARE
8 GOING TO LOOK AT -- AND IT IS ACTUALLY A REFERENCE CALLED
9 "SEMMLER" -- AND IF WE LOOK AT CLAIM 34, IT IS THAT LOWER
02:24:02 10 ELEMENT E THAT IS REALLY THE CONTESTED ELEMENT, AS I
11 UNDERSTAND.

12 AND THEN, I THOUGHT WHAT WAS ALSO INTERESTING IS THERE IS
13 THIS ELEMENT B.2. AND IF YOU LOOK AT THAT ELEMENT B.2. THAT
14 IS SIMILAR TO THE LANGUAGE THAT WE JUST SAW THAT IS IN THE
02:24:17 15 ABSTRACT OF THE PATENT.

16 SO THAT IS THAT INVENTIVE FEATURE OF THIS PATENT. BUT
17 INTERESTINGLY THAT IS NOT REALLY CONTESTED HERE. IT IS ONLY
18 THAT ELEMENT E THAT IS BEING CONTESTED.

19 **Q** LET'S MOVE ON TO THE SEMMLER PATENT THAT YOU JUST
02:24:31 20 MENTIONED.

21 **MS. ONDRICK:** YOUR HONOR, I WOULD OFFER INTO EVIDENCE
22 DX 5085, THE SEMMLER PATENT.

23 **THE COURT:** ANY OBJECTION?

24 **MR. POLLACK:** NO OBJECTION, YOUR HONOR.

02:24:39 25 **THE COURT:** ALL RIGHT. DX 5085 IS ADMITTED.

02:24:42 1 (TRIAL EXHIBIT 5085 RECEIVED IN EVIDENCE)

2 **BY MS. ONDRICK:**

3 **Q** DR. WEI, CAN YOU TELL US A LITTLE BIT ABOUT THE SEMMLER
4 PATENT?

02:24:52 5 **A** SO THE SEMMLER PATENT HAS A SINGLE INVENTOR, MR. PETER
6 SEMMLER. AND THE FILE DATE FOR THIS PATENT WAS IN 1996. AND
7 I BELIEVE IT WAS ISSUED IN 1998.

8 AND THOSE ARE DATES PRIOR TO THE FILE OR ISSUE DATES OF
9 THE '079 PATENT.

02:25:09 10 AND, IT WAS -- THIS PATENT WAS ASSIGNED TO SIEMENS, I
11 GUESS, IN GERMANY.

12 **Q** AND CAN YOU TELL US WHAT YOUR INVALIDITY OPINION IS BASED
13 ON THE SEMMLER PATENT?

14 **A** SO, BASED ON THE SEMMLER PATENT -- WHEN WE ACTUALLY WILL
02:25:25 15 GO THROUGH IT, I'LL SHOW IT. MY OPINION IS THAT SEMMLER
16 ANTICIPATES CLAIM 31, 34, 38 AND 42 OF THE '079 PATENT. SO --
17 AND THEREFORE, IT'S INVALID.

18 **Q** OKAY.

19 **A** OR THESE CLAIMS ARE INVALID.

02:25:44 20 **Q** THE ASSERTED CLAIMS.

21 **A** THE ASSERTED CLAIMS.

22 (DOCUMENT DISPLAYED)

23 **Q** NEXT WHAT I WOULD ASK YOU TO DO IS SIMILAR TO WHAT YOU
24 DID BEFORE FOR BARROW. IF YOU COULD GIVE US A DESCRIPTION OF
02:25:54 25 THE '079 PATENT AND WHAT IT'S DISCLOSING.

02:25:56 1 **A** OKAY. SO, THE SEMMLER PATENT DESCRIBES INTERESTING
2 TECHNOLOGY. AND, WITHIN THERE, IT -- IT DESCRIBES UTILIZING A
3 PART, A SIEMENS PART, CALLED A "TDA4916" -- IT'S 16GG, " I
4 BELIEVE IS WHAT THE SPECIFICATION CALLS IT.

02:26:19 5 AND SO, IT'S TAKING AN EXISTING SIEMENS PART, A CONTROLLER
6 CHIP, AND THEN ALSO ADDING ADDITIONAL CIRCUITRY IN ORDER TO
7 GIVE IT SOME INTERESTING FEATURES.

8 AND SO WHAT WE WILL BE DOING IS LOOKING AT THE WAYS IN
9 WHICH SEMMLER DESCRIBES ITS INVENTION, AND THEN HOW IT RELATES
02:26:42 10 TO THE ASSERTED CLAIMS.

11 **Q** SO IF I UNDERSTAND YOU CORRECTLY, THE SEMMLER PATENT
12 ACTUALLY RESULTED IN A PRODUCT.

13 **A** I'M NOT 100 PERCENT SURE IF IT RESULTED IN A PRODUCT.
14 BUT, IT -- THE SEMMLER INVENTION UTILIZES THIS ONE PARTICULAR
02:27:00 15 PRODUCT FROM SIEMENS.

16 **Q** THANK YOU FOR CLARIFYING.

17 (DOCUMENT DISPLAYED)

18 **Q** SO IF WE COULD GO TO YOUR NEXT SLIDE, I SEE WE HAVE OUR
19 CLAIM CHART AGAIN. SO LET'S GO AHEAD AND START OUR MARCH
02:27:13 20 THROUGH THE CLAIMS.

21 **A** YES, LET'S.

22 **Q** DOES SEMMLER HAVE A SWITCHING REGULATOR?

23 **A** YES.

24 (DOCUMENT DISPLAYED)

02:27:19 25 **A** SO, AGAIN, WE CAN LOOK AT THE ABSTRACT OF SEMMLER. AND IT

02:27:23 1 TALKS ABOUT A CONVERTER APPARATUS. AND SO THAT IS A SWITCHING
2 REGULATOR. SO YOU CAN CHECK OFF THAT FIRST BOX.

3 Q AND YOU ARE CITING THE ABSTRACT FOR THAT, CORRECT?

4 A I'M CITING THE ABSTRACT OF THE SEMMLER PATENT.

02:27:33 5 Q WE WILL CHECK THAT OFF.

6 WERE YOU ABLE TO FIND A POWER SWITCH AS REQUIRED BY
7 ELEMENT A IN SEMMLER?

8 A YES. SO WHAT WE ARE LOOKING AT HERE --

9 (DOCUMENT DISPLAYED)

02:27:44 10 A -- IS FIGURE 5B OF SEMMLER. AND THERE IS A POWER SWITCH
11 THAT I'VE HIGHLIGHTED IN RED, THAT IS SHOWN IN THE MIDDLE OF
12 FIGURE B, 5B. AND THEN, THERE IS ALSO AN ENERGY TRANSFER
13 ELEMENT THAT I'VE OUTLINED HERE IN GREEN.

14 SO IF WE GO THROUGH THE ELEMENT HERE, "A POWER SWITCH THAT
02:28:05 15 IS COUPLED BETWEEN FIRST AND SECOND TERMINALS, THE FIRST
16 TERMINAL TO BE COUPLED TO AN ENERGY TRANSFER ELEMENT." SO
17 THERE IS THAT COUPLING HERE OF THE POWER SUPPLY.

18 "AND THE SECOND TERMINAL TO BE COUPLED TO A SUPPLY RAIL OF
19 A POWER SUPPLY." SO WE NOTICE ON THE OTHER SIDE IT'S COUPLED
02:28:24 20 TO THE SUPPLY RAIL, THE INPUT VOLTAGE THAT'S LABELED HERE,
21 "U_E."

22 Q CAN WE GO AHEAD AND CHECK OFF ELEMENT A?

23 A YES.

24 (DOCUMENT DISPLAYED)

02:28:35 25 Q OKAY. NOW, I SEE WE HAVE GOT ELEMENT B BROKEN UP INTO TWO

02:28:38 1 SECTIONS. WERE YOU ABLE TO FIND THE CONTROL SET -- CONTROL
2 CIRCUIT IN SEMMLER?

3 (DOCUMENT DISPLAYED)

4 **A** SO, I HAVE THE CONTROL CIRCUIT. SO, FOR THIS FIRST HALF
02:28:52 5 OF THE ELEMENT, "CONTROL CIRCUIT COUPLED TO A THIRD TERMINAL
6 AND THE POWER SWITCH, THE THIRD TERMINAL TO BE COUPLED TO AN
7 OUTPUT OF THE POWER SUPPLY, THE CONTROL CIRCUIT COUPLED TO
8 GENERATE A FEEDBACK SIGNAL RESPONSIVE TO THE OUTPUT OF THE
9 POWER SUPPLY, THE CONTROL CIRCUIT COUPLED TO SWITCH THE POWER
02:29:09 10 SWITCH IN RESPONSE TO THE FEEDBACK SIGNAL."

11 IF WE LOOK IN SEMMLER THERE IS THAT CONTROL MODULE
12 TDA4916G OF SIEMENS. AND THAT IS THAT CONTROL CIRCUIT THAT WE
13 HAVE BEEN LOOKING AND TALKING ABOUT.

14 **Q** AND, FOR THE RECORD, YOU HAVE IDENTIFIED COLUMN 5, LINES
02:29:28 15 44 TO 65 OF SEMMLER.

16 **A** YES.

17 **Q** LET'S GET INTO A LITTLE MORE DETAIL FOR THIS CLAIM
18 ELEMENT.

19 (DOCUMENT DISPLAYED)

02:29:34 20 **A** OKAY.

21 **Q** NOW, WHAT WILL YOU SHOWING HERE?

22 **A** SO, THIS IS KIND OF NOW LOOKING AT MORE OF FIGURE 5B THAN
23 WHAT WE HAD JUST SEEN BEFORE. AGAIN, WE HAVE SEEN THE POWER
24 SWITCH. AND IT IS COUPLED -- THE CONTROL CIRCUIT IS COUPLED
02:29:53 25 TO THE THIRD TERMINAL AND THE POWER SWITCH. SO HERE'S THE

02:29:56 1 COUPLING TO THE POWER SWITCH.

2 AND THE THIRD TERMINAL, WHICH IS OVER HERE (INDICATING)
3 AND IT IS AT NODE 8, THAT IS COUPLED TO THE OUTPUT OF THE
4 POWER SUPPLY.

02:30:05 5 AND THAT COUPLING OCCURS THROUGH THIS BOX LABELED "F"
6 WHICH THEN CONNECTS TO THE OUTPUT LABELED U_A (INDICATING).
7 AND THE CONTROL CIRCUIT IS COUPLED TO GENERATE A FEEDBACK
8 SIGNAL RESPONSIVE TO THE OUTPUT OF POWER SUPPLY.

9 WHERE THAT IS, IT COMES IN RIGHT HERE (INDICATING), WHICH
02:30:24 10 IS THE OUTPUT OF COMPARATOR K.

11 AND, THE CONTROL CIRCUIT COUPLED TO SWITCH THE POWER
12 SWITCH, IF WE TRACE THAT UP, THEN IT GOES THROUGH A DRIVER AND
13 IT IS COUPLED TO SWITCH THE POWER SWITCH. AND THAT IS IN
14 RESPONSE TO THE FEEDBACK SIGNAL.

02:30:40 15 SO WE CAN SEE THAT EVERYTHING IS FOUND WITHIN THAT YELLOW
16 BOX.

17 **Q** AND THAT IS WITH REFERENCE TO FIGURE 5B, CORRECT?

18 **A** THAT'S RIGHT.

19 **Q** OKAY.

02:30:48 20 (DOCUMENT DISPLAYED)

21 **Q** SO CAN WE GO AHEAD AND CHECK OFF ELEMENT B.1?

22 **A** YES, WE CAN.

23 **Q** WERE YOU ABLE TO FIND ELEMENT B.2, THE ADDITIONAL CONTROL
24 CIRCUIT REQUIREMENTS IN THE SEMMLER PATENT?

02:31:02 25 (DOCUMENT DISPLAYED)

02:31:03 1 **A** YES.

2 **Q** AND WHAT ARE YOU SHOWING HERE?

3 **A** SO WHAT I'M SHOWING HERE ABOVE IS THE SECOND PIECE OF THAT

4 ELEMENT B. AND THEN, I'M ALSO POINTING TO THE DESCRIPTION IN

02:31:13 5 THE PATENT, IN THE SEMMLER PATENT. FOR EXAMPLE, IN THE

6 ABSTRACT IT SAYS:

7 "AN OBJECT OF THE PRESENT INVENTION IS TO PROVIDE A

8 CONVERTER DEVICE THAT CAN BE OPERATED WITH VARIABLE

9 FREQUENCY IN A LIGHT LOAD OR OVER-LOAD CONDITION AND

02:31:30 10 CAN BE OPERATED WITH A CONSTANT OPERATING FREQUENCY

11 IN A NORMAL OPERATING CONDITION."

12 **Q** I ACTUALLY THINK THAT IS THE SUMMARY OF THE INVENTION

13 THERE.

14 **A** OH, YOU ARE RIGHT.

02:31:38 15 **Q** IT IS MISLABELED.

16 **A** THAT'S RIGHT.

17 **Q** OKAY.

18 **A** AND, ONE THING I'D LIKE TO POINT OUT HERE, AGAIN, AND VERY

19 SIMILAR TO WHAT WE HAD DONE FOR '908, IN TERMS OF MY OPINIONS,

02:31:51 20 IN TERMS OF -- FOR INVALIDITY OF THE '079 CLAIMS, THE

21 ASSUMPTION THAT I MADE WAS THAT I WAS TO ASSUME DR. KELLEY'S

22 POSITION THAT WHEN WE TALK ABOUT "FIXED SWITCHING FREQUENCY,"

23 THAT AS WE HAD HEARD LAST WEEK, YOU KNOW, SMALL FLUCTUATIONS

24 HERE AND THERE WITH RESPECT TO TEMPERATURE, JITTER, THAT

02:32:16 25 DOESN'T REALLY MATTER. AND SO, THAT'S THE ASSUMPTIONS THAT I

02:32:20 1 MADE IN TERMS OF MY INVALIDITY OPINIONS WITH RESPECT TO
2 SEMMLER AND THE '079.

3 (DOCUMENT DISPLAYED)

4 Q AND SO IF WE COULD DIG IN A LITTLE FURTHER TO SEMMLER, CAN
02:32:33 5 YOU TELL US WHAT ELSE YOU FOUND?

6 A YES. SO, WHAT WE HAD JUST SEEN WITH RESPECT TO THE
7 SUMMARY OF INVENTION, THERE WERE THOSE TWO MODES OF OPERATION
8 THAT SEMMLER WAS DESCRIBING. THERE'S THE FIXED FREQUENCY,
9 CONSTANT FREQUENCY, AS IT SAID. AND THERE IS THAT VARYING
02:32:49 10 FREQUENCY THAT WAS IN THERE.

11 AND THEN, IF WE LOOK FURTHER IN THIS ELEMENT, IT SAYS:

12 "THE CONTROL CIRCUIT IS COUPLED TO VARY A SWITCHING
13 FREQUENCY OF THE POWER SWITCH, WITHOUT SKIPPING
14 CYCLES."

02:33:00 15 AND THEN, IF WE LOOK INSIDE THE SEMMLER PATENT, COLUMN 4,
16 LINE 15 TO 37, IF WE ACTUALLY FOCUS ON THE HIGHLIGHTED
17 PORTION, WHAT IT SAYS IS THAT THERE IS THIS DETECTOR CIRCUIT
18 D, AND IT PREVENTS THE CONVERTER FROM REACHING THIS SHORTEST
19 -- SHORTEST POSSIBLE ON-TIME.

02:33:24 20 AND THEN, IF YOU SQUINT A LITTLE BIT, IT'S "T SUBSCRIPT
21 ONMIN." OKAY?

22 AND, WE WILL ACTUALLY DIG INTO THIS A LITTLE BIT FURTHER
23 FOR SOME OF THE OTHER ELEMENTS. BUT WHAT THAT IS TELLING US
24 IS THAT THERE IS THIS MINIMUM POSSIBLE TIME -- EXCUSE ME --
02:33:45 25 THAT THE SWITCH CAN BE ON.

02:33:46 1 AND THAT'S: TONMIN."

2 AND BECAUSE THERE'S THIS MINIMUM POSSIBLE TIME, IT IS
3 ALWAYS SWITCHING. IT CONTINUES TO SWITCH WITHOUT SKIPPING
4 CYCLES.

02:33:58 5 Q AND SO YOU WERE ABLE TO FIND, WITHIN THE SEMMLER PATENT, A
6 CONTROL CIRCUIT THAT HAD A FIXED SWITCHING FREQUENCY APPLYING
7 DR. KELLEY'S UNDERSTANDING OF THAT PHRASE, AS WELL AS A
8 CONTROLLER THAT VARIED A SWITCHING FREQUENCY WITHOUT SKIPPING
9 CYCLES. IS THAT CORRECT?

02:34:18 10 (DOCUMENT DISPLAYED)

11 A THAT'S CORRECT.

12 Q SO LET'S GO AHEAD AND CHECK OFF THAT BOX.

13 A ALL RIGHT.

14 Q NEXT LET'S TURN TO THE FEEDBACK SIGNAL CIRCUIT.

02:34:24 15 A OKAY.

16 (DOCUMENT DISPLAYED)

17 Q TELL US WHERE YOU FOUND THAT IN SEMMLER.

18 A SO IN SEMMLER -- AND I DESCRIBED THIS VERY BRIEFLY
19 BEFORE -- BUT THERE IS A FEEDBACK SIGNAL CIRCUIT. AND WHAT
02:34:35 20 WE CAN SEE HERE IS THE ELEMENT REQUIRES A FEEDBACK SIGNAL
21 CIRCUIT COUPLED TO THE THIRD TERMINAL.

22 THE FEEDBACK CIRCUIT SIGNAL CIRCUIT COUPLED TO GENERATE
23 THE FEEDBACK SIGNAL. AND THE THIRD TERMINAL IS ACTUALLY THE
24 TERMINAL HERE LABELED WITH THE NO. 8. AND THAT IS COMING INTO
02:34:55 25 A COMPARATOR K. AND THEN, THE OUTPUT OF THAT, WHICH IS

02:34:59 1 HIGHLIGHTED IN YELLOW, THAT IS THE FEEDBACK SIGNAL.

2 AND, WE CAN TRACE THIS -- THE NODE 8 -- BACK THROUGH THIS
3 BLOCK HERE (INDICATING). AND THERE IS AN OPTOCOUPLER
4 INSIDE -- AND WE HAVE HEARD A LOT ABOUT OPTOCOUPERS -- THAT
02:35:21 5 THEN FURTHER CONNECTS TO THE OUTPUT THAT IS LABELED U_A .

6 AND SO WE FIND THAT FEEDBACK SIGNAL CIRCUIT, WHICH IS
7 COUPLED TO A THIRD TERMINAL. FEEDBACK SIGNAL CIRCUIT COUPLED
8 TO GENERATE THE FEEDBACK SIGNAL.

9 Q SO CAN WE GO AHEAD AND CHECK THAT CLAIM ELEMENT OFF OUR
02:35:40 10 LIST?

11 A YES.

12 Q AND JUST TO RECAP, ALL OF THE CLAIM ELEMENTS WE HAVE
13 COVERED SO FAR, TO YOUR UNDERSTANDING THEY ARE NOT CONTESTED.
14 CORRECT?

02:35:47 15 A TO MY UNDERSTANDING THAT IS CORRECT.

16 Q I THINK I'M JUMPING THE GUN NOW. WE HAVE ONE MORE THAT IS
17 NOT CONTESTED.

18 A YES.

19 (DOCUMENT DISPLAYED)

02:35:56 20 Q LET'S LOOK AT THE PULSE WIDTH MODULATOR.

21 A OKAY. SO WHAT WE CAN SEE HERE -- ACTUALLY, THIS IS A
22 PRETTY EASY ONE.

23 WHAT WE SEE WITHIN FIGURE 5B OF SEMMLER, THERE IS A BLOCK
24 RIGHT HERE. AND THAT IS LABELED "PULSE WIDTH MODULATOR." AND
02:36:12 25 THE ELEMENT REQUIRES: "A PULSE WIDTH MODULATOR CIRCUIT

02:36:17 1 COUPLED TO SWITCH THE POWER SWITCH IN RESPONSE TO THE FEEDBACK
2 SIGNAL."

3 AND SO WHAT WE SEE HERE IS BEFORE I HAD IDENTIFIED THE
4 OUTPUT OF COMPARATOR K TO BE THE FEEDBACK SIGNAL. IT COMES
02:36:29 5 INTO THIS PULSE WIDTH MODULATOR. AND THEN, THE OUTPUT OF THAT
6 GOES THROUGH A DRIVER AND CONNECTS TO THE POWER SWITCH. AND
7 THAT SIGNAL IS WHAT TURNS THAT POWER SWITCH ON AND OFF.

8 (DOCUMENT DISPLAYED)

9 Q LET'S GO AHEAD AND CHECK OFF ELEMENT D FROM THE CLAIM.

02:36:46 10 A OKAY.

11 Q NOW, LET'S SEE WHAT YOU HAVE FOR US WITH REGARD TO THE
12 LAST CLAIM ELEMENT, ELEMENT E.

13 (DOCUMENT DISPLAYED)

14 Q I THINK THE FIRST THING YOU HAVE PULLED OUT HERE WAS AN
02:36:57 15 AGREED-UPON CONSTRUCTION FOR THIS TERM?

16 A YES.

17 Q WHAT ARE YOU SHOWING?

18 A ALL RIGHT.

19 Q GO AHEAD.

02:37:03 20 A LET'S LOOK AT THE ELEMENT. THE ELEMENT STATES:

21 "WHEREIN ON-TIME AND OFF-TIME VALUES OF A DRIVE
22 SIGNAL GENERATED BY THE PULSE WIDTH MODULATOR CIRCUIT
23 TO SWITCH THE POWER SWITCH VARY SIMULTANEOUSLY."

24 AND THAT IS THE PHRASE THAT WAS CONSTRUED AND AGREED UPON
02:37:22 25 BY THE TWO PARTIES. AND, THE CONSTRUCTION IS BOTH THE ON-TIME

02:37:29 1 AND OFF-TIME VALUES, AND NOT JUST THE ON-TIME OR JUST THE
2 OFF-TIME OF THE DRIVE SIGNAL ARE CHANGED.

3 AND WHEN WE LOOK AT SOME OF THE WAVEFORMS I'LL REMIND US
4 AS TO WHAT "ON-TIME" AND "OFF-TIME" MEANS, BECAUSE IT'S BEEN A
02:37:46 5 WHILE.

6 **Q** OKAY. AND SO YOU USE THIS CONSTRUCTION IN FORMING YOUR
7 OPINIONS, CORRECT?

8 **A** YES, I HAVE.

9 (DOCUMENT DISPLAYED)

02:37:58 10 **Q** WHAT ARE YOU SHOWING HERE WITH REGARD TO SEMMLER AT FIGURE
11 2A?

12 **A** OKAY. SO, CLAIM ELEMENT E IS THAT CONTESTED ELEMENT. AND
13 SO, I'M GOING TO JUST WARN YOU AHEAD OF TIME, IT'S NOT LIKE --
14 IT REQUIRES SOME STEPPING THROUGH TO UNDERSTAND WHAT'S GOING
02:38:17 15 ON. OKAY?

16 AND, WHAT WE SEE HERE IN FIGURE 2A IS A WAVEFORM OF THE
17 DRIVE SIGNAL THAT GOES INTO THE POWER SWITCH. OKAY? AND,
18 WHEN THE WAVEFORM HERE, 2A, IS HIGH, THAT'S THE ON-TIME. AND
19 THAT'S WHEN THE POWER SWITCH IS ON. AND WHEN THE WAVEFORM
02:38:40 20 HERE (INDICATING) IS LOW -- RELATIVE TO THAT, IT'S LOW HERE --
21 THAT'S THE OFF-TIME. OKAY?

22 AND WHAT THE SEMMLER PATENT DESCRIBES IS THAT WHEN YOU'RE
23 IN THAT SECOND RANGE, THAT VARIABLE FREQUENCY RANGE, THE
24 SEMMLER INVENTION IS DESCRIBING HOW IT VARIES THE FREQUENCY.
02:39:06 25 OKAY?

02:39:07 1 AND THE WAY IN WHICH IT VARIES THE FREQUENCY IS THERE IS A
2 VALUE CALLED "T_{ONMIN}*."

3 AND IT'S A NUMBER, ESSENTIALLY -- I THINK IT'S IN FORM OF
4 VOLTAGE -- BUT IT'S IS A NUMBER THAT CORRESPONDS TO KIND OF
02:39:25 5 WHAT THE MINIMUM "ON" TIME OUGHT TO BE. OKAY?

6 AND SO, WHEN THE CIRCUIT IS IN OPERATION, AND THE ACTUAL
7 "ON" TIME OF THE SWITCH REDUCES DOWN TO BE LESS THAN THE
8 MINIMUM "ON" TIME VALUE THAT IS GENERATED WITHIN SEMMLER, THEN
9 IT TELLS THE OSCILLATOR, "SLOW DOWN." OKAY?

02:39:52 10 AND THAT IS HOW IT VARIES THE FREQUENCY.

11 AND SO, WHAT WE CAN SEE HERE IS, FIRST OF ALL -- AND THEN,
12 ACTUALLY, THE SEMMLER PATENT HAS THAT FIXED FREQUENCY MODE OF
13 OPERATION, AND THAT'S PULSE WIDTH MODULATION. AND WHEN YOU
14 HAVE PULSE WIDTH MODULATION, THE CYCLE TIME IS GOING TO BE
02:40:12 15 FIXED. AND YOU ARE ONLY GOING TO BE SHIFTING AROUND HOW LONG
16 OR HOW LONG THE POWER SWITCH IS ON FOR.

17 SO IF YOU HAVE A FIXED PERIOD, IF THE ON-TIME GETS LARGER,
18 THEN THE OFF-TIME NECESSARILY GETS SMALLER.

19 AND SO THE ON-TIME AND OFF-TIMES ARE VARYING
02:40:32 20 SIMULTANEOUSLY.

21 (DOCUMENT DISPLAYED)

22 **Q** LET'S GO TO YOUR NEXT SLIDE ON THIS POINT, IF WE COULD.

23 **A** SURE.

24 **Q** WHAT ARE YOU SHOWING HERE?

02:40:43 25 **A** WHAT I'M SHOWING HERE IS KIND OF A BLOWUP AND TRYING TO

02:40:46 1 FURTHER ILLUSTRATE WHAT I HAVE BEEN TALKING ABOUT.

2 AGAIN, SEMMLER DESCRIBES THE VARIABLE FREQUENCY AND THE
3 CONSTANT FREQUENCY RANGE WITH RESPECT TO THE LOAD. AND THEN,
4 AGAIN, I'VE JUST RECREATED THE WAVEFORMS WE SAW PRIOR TO A.

02:41:02 5 AND, IN -- IN THIS CASE WHAT I'M SHOWING IS THAT WHEN THE
6 ON-TIME IS LESS THAN THIS VALUE T_{ONMIN} *, WHEN THAT HAPPENS,
7 THE DETECTOR CIRCUIT D TELLS THE OSCILLATOR TO REDUCE THE
8 FREQUENCY. AND THAT IS THE INVENTION THAT SEMMLER IS
9 DESCRIBING.

02:41:21 10 **Q** AND THE DETECTOR CIRCUIT, THAT IS SHOWN IN FIGURE 1. IS
11 THAT CORRECT?

12 **A** THAT IS, YES. THE DETECTOR CIRCUIT, D, IS SHOWN IN
13 FIGURE 1.

14 **Q** OKAY. LET'S MOVE ON TO THE NEXT PART OF ELEMENT E, IF WE
02:41:34 15 COULD.

16 (DOCUMENT DISPLAYED)

17 **A** OKAY.

18 **Q** WHAT ARE YOU SHOWING HERE?

19 **A** SO, HERE, WHAT I'M SHOWING IS THAT WE JUST DESCRIBED HOW
02:41:43 20 THE POWER SWITCH, THE ON-AND-OFF TIMES OF THE POWER SWITCH
21 VARY SIMULTANEOUSLY. SO THEY'RE NOT -- THEY ARE CHANGING
22 TOGETHER.

23 AS A FUNCTION OF A LEVEL OF LOAD CURRENT -- OF LOAD,
24 COUPLED TO THE OUTPUT OF THE POWER SUPPLY TO VARY THE
02:41:59 25 SWITCHING FREQUENCY OF THE POWER SWITCH WITHOUT SKIPPING

02:42:02 1 CYCLES FOR THE SECOND RANGE OF FEEDBACK SIGNAL VALUES.

2 AND SO, WHAT I'VE SHOWN HERE IS -- AND WE CAN LOOK AT
3 EITHER FIGURE, BUT LET'S ACTUALLY LOOK AT FIGURE 5B. WHAT'S
4 SHOWN IS ON THE UPPER RIGHT-HAND CORNER WITH THE RED OUTLINE
02:42:18 5 (INDICATING), THAT IS THE OUTPUT OF THE POWER SUPPLY.

6 AND, THAT COMES IN THROUGH THIS BLOCK LABELED "F"
7 (INDICATING), THAT CONTAINS THAT OPTOCOUPLER. THAT COMES IN,
8 AND THAT IS THE -- I THINK THAT IS THE THIRD TERMINAL. AND IT
9 GOES INTO A COMPARATOR K. AND SO IT'S MODULATING. IT'S
02:42:40 10 PROVIDING THE FEEDBACK SIGNAL IN ORDER TO CHANGE THE PULSE
11 WIDTH, THE ON-TIME, AND THE OFF-TIME.

12 AND THEN, WHAT WE CAN ALSO SEE IS THERE'S A CONNECTION
13 BETWEEN THE OUTPUT OF THIS PULSE WIDTH MODULATOR BLOCK
14 (INDICATING), WHICH IS THAT ON AND OFF, THE WAVEFORMS OF ON
02:43:01 15 AND OFF, THAT ARE GOING INTO THIS DETECTOR CIRCUIT D. AND
16 THEN, WE SEE ANOTHER CONNECTION THAT COMES AROUND INTO THE
17 CLOCK GENERATOR, OR THE VCO.

18 AND SO IT'S KIND OF THIS FUNCTION THAT IS CAUSING THE
19 FREQUENCY TO REDUCE THAT VARIABLE FREQUENCY RANGE.

02:43:22 20 **Q** AND, FOR THE RECORD, YOU HAVE BEEN DISCUSSING FIGURES 1
21 AND 5B OF SEMMLER AS WELL AS COLUMN 3, LINES 55 TO 65.

22 **A** YES.

23 (REPORTER INTERRUPTION)

24 (DOCUMENT DISPLAYED)

02:43:41 25 **Q** AND SO I KNOW PRETTY COMPLICATED, DR. WEI, BUT CAN YOU

02:43:46 1 TELL US WHAT YOUR OPINION IS WITH REGARD TO CLAIM ELEMENT E?

2 **A** YES. SO WITH REGARD TO ELEMENT E, WHAT I'VE JUST
3 IDENTIFIED FOR YOU ARE ALL THE DIFFERENT COMPONENTS WITHIN
4 SEMMLER THAT MEET THE -- YEAH, THAT MEET THE LIMITATION OF
02:44:03 5 ELEMENT E. AND, THEREFORE, NOW WE HAVE BEEN ABLE TO CHECK OFF
6 ALL OF THE BOXES FOR CLAIM 34.

7 AND SO WITH RESPECT TO CLAIM 34, IT IS MY OPINION THAT
8 SEMMLER ANTICIPATES THIS CLAIM OF THE '079 PATENT.

9 **Q** OKAY.

02:44:18 10 **THE COURT:** ARE YOU LOOKING FOR A PLACE TO POSSIBLY
11 BREAK, MS. ONDRICK, IN THE NEXT FEW MINUTES?

12 **MS. ONDRICK:** YES. YOU KNOW WHAT? WHY DON'T WE DO
13 ONE MORE SLIDE, AND THEN WE CAN STOP. AND THEN, IT WILL JUST
14 BE A FEW MORE QUESTIONS AT THE END.

02:44:33 15 BUT IT'S -- YOU KNOW, NOT TO TIP OUR HAND, BUT THERE ARE
16 THREE OTHER CLAIMS. AND SO THE ON-TIME/OFF-TIME CLAIM
17 LIMITATION MATCHES FOR SOME AND VARIES FOR ANOTHER. SO WE
18 WILL HAVE TO JUST COVER THAT ON-TIME, THE DIFFERENT FLAVOR OF
19 THE ON-TIME CLAIM LIMITATION WITH DR. WEI FOR THOSE OTHER
02:44:51 20 CLAIMS.

21 BUT WE DON'T HAVE TO DO A MARCH-THROUGH.

22 **THE COURT:** YES. BUT, IS THERE SOMETHING ELSE?
23 YOU'VE COMPLETED 34.

24 **MS. ONDRICK:** YES.

02:45:00 25 **THE COURT:** SO WHERE WERE YOU GOING TO GO IF WE KEPT

02:45:03 1 GOING?

2 **MS. ONDRICK:** WELL, WE WOULD LINK THIS TO CLAIM 42.
3 AND THEN, WE WOULD HAVE TO DISCUSS CLAIM 31, WHICH HAS A
4 DIFFERENT FLAVOR OF THE ON-TIME OFF-TIME PIECE.

02:45:14 5 **THE COURT:** HOW LONG ARE YOU GOING TO TAKE TO LINK 42
6 TO WHATEVER YOU --

7 **MS. ONDRICK:** WE ARE GOING TO HAVE TO DO A CLAIM
8 CONSTRUCTION ON A FEW THINGS. SO IF YOU WANT TO TAKE A BREAK
9 NOW, THAT'S FINE.

02:45:26 10 **THE COURT:** I THINK THAT MIGHT BE A GOOD IDEA.
11 ALL RIGHT. LADIES AND GENTLEMEN, WE WILL TAKE 15 MINUTES
12 NOW. JUST ROUND IT OFF, AND WE WILL BE READY AT 3:00. OKAY.

13 **THE COURT:** OKAY. THANK YOU.

14 (JURY EXCUSED)

02:45:46 15 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
16 PRESENCE OF THE JURY)

17 **THE COURT:** ALL RIGHT. I DON'T KNOW THAT WE REALLY
18 HAVE TIME WHILE THE JURY IS TAKING A BREAK TO DEAL WITH
19 WHATEVER YOUR OBJECTION WAS, MR. POLLACK. DO YOU WANT TO
02:45:55 20 RESERVE THAT UNTIL THE END OF THE DAY OR --

21 **MR. SCHERKENBACH:** THAT'S FINE, YOUR HONOR.

22 **THE COURT:** ALL RIGHT. THANK YOU. WE ARE IN RECESS.

23 (RECESS TAKEN FROM 2:45 TO 3:00 P.M.)

24 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
03:03:01 25 PRESENCE OF THE JURY)

03:03:04 1 **THE CLERK:** PLEASE COME TO ORDER.
2 **THE COURT:** ALL RIGHT. PLEASE BRING --
3 **MS. ONDRICK:** YOUR HONOR, WE WANTED TO ALERT YOU TO
4 ONE POSSIBLE ISSUE.

03:03:13 5 **THE COURT:** YES.

6 **MS. ONDRICK:** DR. WEI HAS A TRIAL NEXT WEEK AT THE
7 ITC, SO, IF WE'RE -- WE'RE NOT GOING TO IMPEDE CROSS OR THE
8 LENGTH OF CROSS IN ANY WAY. BUT, IF IT DOES LOOK LIKE POWER
9 INTEGRATIONS IS FINISHING UP, IF WE COULD INDULGE THE COURT
03:03:27 10 FOR MAYBE ANOTHER, YOU KNOW, 15 MINUTES FOR REDIRECT AND
11 FINISH THE WITNESS TODAY, WE WOULD LIKE TO DO THAT. BUT, OF
12 COURSE, THAT'S SUBJECT TO THE COURT'S SCHEDULE.

13 **THE COURT:** WELL, WE'LL SEE HOW IT GOES.

14 **MS. ONDRICK:** OKAY.

03:03:41 15 **THE COURT:** ALL RIGHT, THANK YOU.

16 (THE FOLLOWING PROCEEDINGS WERE HELD IN THE PRESENCE OF
17 THE JURY)

18 **THE COURT:** OKAY.

19 **THE CLERK:** PLEASE BE SEATED.

03:04:09 20 **THE COURT:** WE WILL CONTINUE WITH DR. WEI AT THIS
21 TIME.

22 **BY MS. ONDRICK:**

23 **Q** DR. WEI, WE JUST CONCLUDED WITH YOUR OPINION OF INVALIDITY
24 ON CLAIM 34 OF THE '079 PATENT, BASED ON SEMMLER. AND I SEE
03:04:29 25 YOU HAVE A MAPPING OF CLAIM 34 TO CLAIM 42?

03:04:32 1 **A** YES, SO --

2 **Q** GO AHEAD.

3 **A** WHAT WE CAN SEE FROM THIS MAPPING IS THAT THE ELEMENTS
4 HIGHLIGHTED IN BLUE, RED AND YELLOW ARE THE SAME. AND BECAUSE
03:04:44 5 CLAIM 42 IS A SUBSET OF CLAIM 34, IT IS MY OPINION THAT CLAIM
6 42 IS ALSO INVALID. AND ANTICIPATED BY SEMMLER.

7 **Q** THANK YOU. AND NOW WE ARE MAPPING CLAIM 34 TO CLAIM 31.
8 AND IT APPEARS THAT ALL OF THE CLAIM ELEMENTS FROM CLAIM 34
9 MATCH UP TO CLAIM 31 EXCEPT FOR THE "WHEREIN" CLAUSE OF CLAIM
03:05:06 10 31.

11 **A** THAT'S CORRECT. THAT LAST ELEMENT OF CLAIM 31.

12 (DOCUMENT DISPLAYED)

13 **Q** SO, IF WE COULD, DR. WEI, VERY QUICKLY GO THROUGH THIS
14 WHEREIN CLAUSE ELEMENT E OF CLAIM 31.

03:05:22 15 **A** OKAY.

16 (DOCUMENT DISPLAYED)

17 **Q** AND I SEE YOU PULLED UP THE COURT'S -- OR THE PARTIES'
18 AGREED-UPON CONSTRUCTION. CAN YOU PLEASE IDENTIFY WHAT THIS
19 IS?

03:05:30 20 **A** SURE. SO THE CLAIM ELEMENT E HERE, REQUIRES (AS READ):

21 "WHEREIN THE FIRST AND SECOND RANGES OF THE FEEDBACK
22 SIGNAL CORRESPOND TO FIRST AND SECOND RANGES OF
23 ON-TIME VALUES OF A DRIVE SIGNAL GENERATED BY THE
24 PULSE WIDTH MODULATOR CIRCUIT TO SWITCH THE POWER
03:05:46 25 SWITCH..."

03:05:48 1 AND THE CONSTRUCTION IS WITH RESPECT TO THE HIGHLIGHTED
2 YELLOW. AND IT SAYS:

3 "THERE IS A FIRST RANGE OF ON-TIME VALUES OF A DRIVE
4 SIGNAL CORRESPONDING TO A FIRST RANGE OF FEEDBACK
03:05:59 5 VALUES AND A SECOND RANGE OF ON-TIME VALUES OF THE
6 DRIVE SIGNAL CORRESPONDING TO A SECOND RANGE OF
7 FEEDBACK VALUES."

8 AND THAT'S WHAT WE WILL FOCUS ON. AND MOREOVER IF YOU
9 LOOK IN THE NON-HIGHLIGHTED PORTION OF ELEMENT E, "DRIVE
03:06:17 10 SIGNAL GENERATED BY THE PULSE WIDTH MODULATOR CIRCUIT TO
11 SWITCH THE POWER SWITCH," WE'VE ALREADY SEEN THAT PART.

12 (DOCUMENT DISPLAYED)

13 **Q** SO LET'S JUMP INTO WHAT YOU HAVE FOUND HERE. IS THIS THE
14 SAME AS WITH A WHAT WE HAVE SEEN BEFORE FOR CLAIM ELEMENT E?

03:06:32 15 **A** IT IS VERY SIMILAR TO WHAT WE SAW BEFORE IN THE OTHER
16 CLAIM ELEMENT E. SO WHAT I'VE DONE IS BROKEN UP THE FIRST
17 RANGE ON TOP, AND THAT'S DURING THAT FIXED OR CONSTANT
18 FREQUENCY. AND THE SECOND RANGE IS IN THE VARYING FREQUENCY.
19 AND, WHAT WE CAN SEE HERE FROM THE DIAGRAM IS THAT FOR RANGE
03:06:51 20 1, THE ON-TIME IS BETWEEN A VALUE T_{ONMIN*} TO T_{ONMAX} . THERE'S
21 A MAXIMUM ON-TIME FOR THE SWITCH.

22 AND THEN, FOR THE SECOND RANGE, THE WAVEFORMS ON THE
23 BOTTOM, WHAT WE SEE IS THAT THE RANGE OF ON-TIME VALUES HERE
24 IS BETWEEN T_{ONMIN} , WHICH IS ACTUALLY DIFFERENT FROM T_{ONMIN*} UP
03:07:19 25 TO T_{ONMAX} . AND FURTHERMORE, THAT T_{ONMIN*} IS GREATER THAN T_{ON}

03:07:25 1 -- THE ABSOLUTE MINIMUM ON-TIME THAT THE SWITCH CAN HAVE.

2 (DOCUMENT DISPLAYED)

3 **Q** AND WHAT ARE YOU SHOWING HERE WITH REGARD TO THE NEXT
4 SLIDE? IS THERE ANYTHING DIFFERENT?

03:07:38 5 **A** WHAT THIS IS SHOWING IS THAT THE CONSTANT ON-TIME AS
6 DESCRIBED BY SEMMLER, THE T_{ONMIN}^* IS -- PREFERABLY LIES
7 SLIGHTLY ABOVE T_{ONMIN} . SO AGAIN, GOING BACK TO THAT EQUATION
8 I SHOWED IN THE PREVIOUS SLIDE, T_{ONMIN}^* IS GREATER THAN
9 T_{ONMIN} .

03:07:57 10 **Q** OKAY.

11 (DOCUMENT DISPLAYED)

12 **Q** SO, CAN WE GO AHEAD AND CHECK OFF CLAIM ELEMENT E OF CLAIM
13 31 AS ANTICIPATED BY SEMMLER?

14 **A** YES. SO, AS I SHOWED, THERE ARE THESE FIRST AND SECOND
03:08:09 15 RANGES OF ON-TIME THAT CORRESPOND TO THE FIRST AND SECOND
16 RANGES OF FEEDBACK. AND THEREFORE, THAT ELEMENT IS FOUND IN
17 SEMMLER.

18 (REPORTER INTERRUPTION)

19 **BY MS. ONDRICK:**

03:08:25 20 **Q** AND SO, IS IT YOUR OPINION THAT SEMMLER ANTICIPATES CLAIM
21 31 OF THE '079 PATENT?

22 **A** YES, IT IS.

23 (DOCUMENT DISPLAYED)

24 **Q** AND WE SEE HERE A COMPARISON OF CLAIM 31 TO CLAIM 38 AND
03:08:37 25 WE SEE A MATCH OF CLAIM ELEMENTS. IS THAT RIGHT?

03:08:40 1 **A** AGAIN, WE SEE THAT SUBSET. AND SO, IT IS FURTHER MY
2 OPINION THAT CLAIM 38 IS INVALID BECAUSE, AGAIN, IT'S
3 ANTICIPATED BY SEMMLER.

4 **Q** OKAY. AND I HAVE ONE FINAL SET OF QUESTIONS, DR. WEI.
03:08:54 5 WE'LL HARKEN BACK QUICKLY TO YOUR NONINFRINGEMENT OPINIONS.

6 YOUR NONINFRINGEMENT OPINIONS TODAY, WERE THEY BASED ON
7 THE SCREENSHOTS THAT WE HAVE SEEN AND PROVIDED IN THIS CASE,
8 APPEARING AT DX 5709, AND THE VARIOUS INDIVIDUAL SCREENSHOTS
9 WE HAVE SEEN LISTED?

03:09:13 10 **A** YES. IT'S BASED ON THOSE SCREENSHOTS AND ALSO MY
11 UNDERSTANDING, THE -- THE MATERIALS, THE DATASHEETS, THE
12 SCHEMATICS, ET CETERA.

13 **MS. ONDRICK:** THANK YOU. I HAVE NO FURTHER QUESTIONS
14 AT THIS TIME.

03:09:25 15 **THE COURT:** ALL RIGHT. THEN, CROSS-EXAMINATION OF
16 DR. WEI.

17 **MR. POLLACK:** THANK YOU, YOUR HONOR. HOWARD POLLACK
18 FOR POWER INTEGRATIONS. I WILL JUST BEG THE COURT'S
19 INDULGENCE FOR A MOMENT SO I CAN HAND OUT SOME DOCUMENTS.

03:09:48 20 **THE COURT:** OKAY.

21 **MR. POLLACK:** MAY I APPROACH THE WITNESS, YOUR HONOR?

22 **THE COURT:** YOU MAY. I'M NOT SURE WHAT HE IS GOING
23 TO BRING YOU, DR. WEI.

24

25

CROSS EXAMINATION

BY MR. POLLACK:

Q GOOD AFTERNOON, DR. WEI.

A GOOD AFTERNOON.

Q SO, JUST FOR YOUR REFERENCE, WHAT I HAVE HANDED YOU ARE TWO BINDERS. ONE THAT'S GOT SOME OF THE DOCUMENTS THAT I'M GOING TO ASK YOU ABOUT, EXHIBITS IN THE CASE. THE OTHER HAS, FOR YOUR REFERENCE IF YOU NEED IT, YOUR DEPOSITION TESTIMONY AND EXPERT REPORTS.

A GREAT.

Q DR. WEI, I WANT TO START AND ASK YOU JUST A FEW QUESTIONS ABOUT YOUR BACKGROUND. AND JUST FOR REFERENCE, THE '908 PATENT IN THIS CASE, THAT WAS FILED IN 1999. CORRECT?

A 1999, YES.

Q AND THE '079 PATENT, THAT WAS FILED IN THE YEAR 2000, RIGHT?

A 2000, YES.

Q AND YOU RECEIVED YOUR PH.D. IN 2001. RIGHT?

A THAT'S CORRECT.

Q SO, IN THE YEAR 2000 YOU WERE STILL IN GRADUATE SCHOOL, FAIR?

A UM, IT'S PRETTY FAIR. WHAT HAPPENED WAS I FINISHED ALL OF MY RESEARCH FOR MY THESIS IN 2000, AND THEN, INSTEAD OF STICKING AROUND AT SCHOOL TO JUST WRITE MY THESIS I ACTUALLY ENDED UP GOING TO PORTLAND, OREGON TO JOIN A STARTUP BECAUSE I

03:11:31 1 WANTED TO GET SOME INDUSTRY EXPERIENCE.

2 SO I ENDED UP TAKING ABOUT A YEAR TO FINISH OFF ABOUT 20,
3 30 PERCENT OF MY THESIS. THAT ACTUALLY WAS HARD WRITING THE
4 THESIS, AND WORKING FULL-TIME, BUT -- AND SO I ACTUALLY -- MY
03:11:45 5 DEGREE SAYS 2001, BUT I WAS PRETTY MUCH DONE WITH MY PH.D. IN
6 2000.

7 Q OKAY. AND YOU WORKED AT ACCELERANT, THAT WAS THE STARTUP?

8 A YES.

9 Q WHEN YOU WERE THERE YOU DIDN'T WORK ON ANY CHIPS FOR
03:11:56 10 CONTROLLING SWITCHMODE POWER SUPPLIES, RIGHT?

11 A YEAH. MY -- AT ACCELERANT I DID NOT WORK ON SWITCHMODE
12 POWER SUPPLIES.

13 Q AND WHEN YOU WERE IN GRADUATE SCHOOL YOU ALSO HAD A COUPLE
14 OF INTERNSHIPS, RIGHT?

03:12:11 15 A I DID.

16 Q YOU WORKED AT TEXAS INSTRUMENTS AND SILICON GRAPHICS?

17 A YES.

18 Q BUT AT YOUR TIME IN THOSE COMPANIES, YOU DID NOT WORK ON
19 POWER SUPPLY CONTROLLERS THERE, EITHER, RIGHT?

03:12:21 20 A NO. IN THOSE COMPANIES, I WORKED ON DIFFERENT KIND OF
21 CIRCUITS.

22 Q SO AFTER YOU GOT YOUR DEGREE, YOU WENT TO HARVARD AND
23 BECAME A PROFESSOR THERE, RIGHT?

24 A THAT'S CORRECT.

03:12:33 25 Q AND YOU HAVE BEEN THERE EVER SINCE.

03:12:36 1 **A** YES.

2 **Q** SO I WANT TO TURN TO YOUR OPINIONS ON THE '908 PATENT AND
3 ADDRESS THOSE FIRST, AND I WANT TO FOCUS FIRST ON THE QUESTION
4 OF INFRINGEMENT. OKAY?

03:12:48 5 **A** OKAY.

6 **Q** AND, I THINK I WANT TO TALK ABOUT SOME THINGS FIRST THAT
7 YOU HAVE NOT OFFERED AN OPINION ON JUST SO WE CAN BE CLEAR?

8 **A** OKAY.

9 **Q** YOU HAVE NOT OFFERED AN OPINION THAT THE ACCUSED PRODUCTS
03:12:59 10 LACK A MULTI-FUNCTION CIRCUIT COUPLED TO RECEIVE A SIGNAL.
11 CORRECT?

12 **A** I THINK THAT'S CORRECT.

13 **Q** AND, YOU HAVE ALSO OFFERED NO OPINION ON THE INFRINGEMENT
14 OF THE DEPENDENT CLAIM, CLAIM 27, INDEPENDENT OF YOUR OPINIONS
03:13:15 15 ON CLAIM 26. RIGHT?

16 **A** INDEPENDENT, NO, IT'S WITH RESPECT TO THE CLAIM 26.

17 **Q** RIGHT. OKAY. AND SO YOUR OPINION IS FOCUSED ON THE
18 CONCEPT -- WELL, YOUR NONINFRINGEMENT OPINION IS BECAUSE YOU
19 THINK THAT THE ACCUSED PRODUCTS LACK THE CURRENT LIMIT
03:13:35 20 ELEMENTS. RIGHT?

21 **A** THAT'S CORRECT.

22 **Q** I WANT TO TURN YOUR ATTENTION TO THE DATASHEET FOR ONE OF
23 THE REPRESENTATIVE PARTS THAT WE TALKED ABOUT, THAT'S PX 92 IN
24 YOUR BOOK.

03:13:48 25 **MR. POLLACK:** AND MR. SAYERS, CAN YOU BRING UP THE

03:13:50 1 FIRST PAGE OF PX 92? THIS IS ALREADY IN EVIDENCE.

2 (DOCUMENT DISPLAYED)

3 **BY MR. POLLACK:**

4 **Q** DR. WEI, YOU RECOGNIZE THIS IS THE DATASHEET FOR THE
03:14:02 5 FAN6747, RIGHT?

6 **A** YES.

7 **MR. POLLACK:** OKAY. MR. SAYERS, I WANT TO START WITH
8 THE LIST OF FEATURES ON THE LEFT.

9 (DOCUMENT DISPLAYED)

03:14:12 10 **MR. POLLACK:** AND COULD YOU HIGHLIGHT THE FEATURE,
11 PEAK CURRENT MODE CONTROL, CYCLE-BY-CYCLE CURRENT LIMITING.

12 (DOCUMENT HIGHLIGHTED)

13 **BY MR. POLLACK:**

14 **Q** DO YOU SEE THAT, DR. WEI?

03:14:23 15 **A** YES, I DO.

16 **Q** AND SO ONE OF THE FEATURES OF THIS PART IS CYCLE-BY-CYCLE
17 CURRENT LIMITING, CORRECT?

18 **A** YES.

19 **MR. POLLACK:** IF YOU CAN JUMP OVER, MR. SAYERS, TO
03:14:33 20 THE DESCRIPTION ON THE OTHER SIDE.

21 (DOCUMENT DISPLAYED)

22 **MR. POLLACK:** AND BRING UP THE THIRD PARAGRAPH THERE.

23 (DOCUMENT DISPLAYED)

24 **BY MR. POLLACK:**

03:14:45 25 **Q** (AS READ)

03:14:49 1 "THE FAN6747 IS ESPECIALLY DESIGNED FOR SMPS WITH
2 PEAK-CURRENT OUTPUT. IT INCORPORATES A
3 CYCLE-BY-CYCLE CURRENT LIMITING..."
4 CORRECT?

03:14:57 5 **A** THAT'S WHAT IT SAYS.

6 **MR. POLLACK:** LET'S NEXT GO TO PIN DESCRIPTIONS OF PX
7 92 ON THE NEXT PAGE, MR. SAYERS.

8 (DOCUMENT DISPLAYED)

9 **MR. POLLACK:** AND CAN YOU BLOW UP THE FIRST PART?

03:15:14 10 (DOCUMENT DISPLAYED)

11 **MR. POLLACK:** THERE YOU GO.

12 **BY MR. POLLACK:**

13 **Q** DR. WEI, DO YOU UNDERSTAND THAT FOR THIS PART,
14 DR. KELLEY'S IDENTIFIED THE HV PIN AS CORRESPONDING TO THE
03:15:27 15 CLAIM MULTI-FUNCTION TERMINAL? IS THAT YOUR UNDERSTANDING?

16 **A** YES, I BELIEVE THAT'S TRUE.

17 **Q** AND LOOKING AT THE HV PIN, THE DESCRIPTION SAYS, AMONG
18 OTHER THINGS, THAT (AS READ):

19 "HIGH/LOW LINE COMPENSATION DOMINATES THE OCP LEVEL
03:15:44 20 AND CYCLE-BY-CYCLE CURRENT LIMIT TO SOLVE THE UNEQUAL
21 OCP LEVEL AND POWER LIMIT PROBLEM UNDER UNIVERSAL
22 INPUT."

23 DO YOU SEE THAT?

24 **A** YES, I DO.

03:15:56 25 **Q** AND "OCP" STANDS FOR "OVER CURRENT PROTECTION," RIGHT.

03:15:59 1 DR. WEI?

2 **A** I BELIEVE "OCP" STANDS FOR "OVER CURRENT PROTECTION."

3 YES.

4 **Q** AND IT SAYS THAT THIS FEATURE OF HIGH-LOW LINE
03:16:11 5 COMPENSATION IS USED TO SOLVE THE POWER LIMIT PROBLEM UNDER
6 UNIVERSAL INPUT, RIGHT?

7 **A** YES, THAT'S --

8 **Q** OKAY. I WANT TO LOOK AT ONE OF THE DEMONSTRATIVES YOU
9 *USED DURING YOUR TESTIMONY.

03:16:24 10 **MR. POLLACK:** MR. SAYERS, CAN YOU BRING UP DDX 497?
11 (DOCUMENT DISPLAYED)

12 **BY MR. POLLACK:**

13 **Q** AND FOCUSING OVER HERE ON THE DATASHEETS -- AND THIS IS
14 THE -- A FAN6747 DATASHEET AT PAGE 9, DO YOU SEE THAT?

03:16:39 15 **A** YES, I DO.

16 **Q** AND YOU SEE HOW YOU SHOWED US JUST ONE LITTLE PIECE OF IT
17 OUT OF THAT DATASHEET?

18 **A** YEAH, WE PROBABLY -- WE SHOULD HAVE EXTENDED IT FURTHER.

19 **Q** OKAY.

03:16:47 20 **MR. POLLACK:** SO, MR. SAYERS CAN YOU BRING UP PAGE 9
21 OF THE DATASHEET, PX 92, PLEASE?

22 (DOCUMENT DISPLAYED)

23 **MR. POLLACK:** AND CAN YOU BLOW UP THE "CURRENT SENSE
24 SECTION" UP AT THE TOP THERE? "CURRENT SENSE SECTION"?

03:17:02 25 (DOCUMENT DISPLAYED)

03:17:03 1 **BY MR. POLLACK:**

2 **Q** NOW, DR. WEI, YOU POINTED TO SOME VALUES OVER HERE ON THE
3 RIGHT. DO YOU RECALL THAT?

4 **A** YES. THAT LINE AND THE LINE BELOW IT ARE THE TWO LINES
03:17:16 5 THAT WE -- THAT HIGHLIGHTED REGION IS WHAT WAS IN THAT SLIDE.

6 (REPORTER INTERRUPTION)

7 **THE WITNESS:** "WAS IN THAT SLIDE."

8 **BY MR. POLLACK:**

9 **Q** LET'S MOVE OVER AND LOOK AT WHAT THOSE VALUES CORRESPOND
03:17:28 10 TO. YOU SEE THERE IS SOMETHING THAT SAYS " $V_{\text{LIMIT-L}}$ "?

11 **A** YES.

12 **Q** AND THE DESCRIPTION OF THE PARAMETER IS "CURRENT LIMIT AT
13 LOW LINE." DO YOU SEE THAT?

14 **A** YES. IT'S A VOLTAGE. AND YES, THAT IS WHAT IT SAYS.

03:17:42 15 **Q** ALL RIGHT. SO IT'S DESCRIBED AS THE CURRENT LIMIT AT LOW
16 LINE. CORRECT?

17 **A** CORRECT.

18 **Q** AND BELOW THAT, YOU HAVE $V_{\text{LIMIT-H}}$. AND THAT'S DESCRIBED
19 AS THE "CURRENT LIMIT AT HIGH LINE." RIGHT?

03:17:54 20 **A** RIGHT. SO THOSE ARE CORRESPONDING TO DIFFERENT CONDITIONS
21 ON THE INPUT VOLTAGE.

22 **Q** RIGHT. AND THE VALUES OF $V_{\text{LIMIT-L}}$ AND $V_{\text{LIMIT-H}}$ ARE
23 DIFFERENT. CORRECT?

24 **A** YES. THEY ARE DIFFERENT.

03:18:09 25 **Q** ALL RIGHT. SO AS REFLECTED IN THIS TABLE, THE CURRENT

03:18:12 1 LIMIT PARAMETER IS CHANGED WHEN THE INPUT VOLTAGE CHANGES
2 BETWEEN HIGH LINE AND LOW LINE. RIGHT?

3 **A** THE -- SO, WHAT WE ARE LOOKING AT HERE, WITH RESPECT TO
4 THE CURRENT SENSE SECTION --

03:18:35 5 (WITNESS EXAMINES DOCUMENT)

6 **A** RIGHT, SO THERE ARE THESE THRESHOLD VOLTAGES, $V_{LIMIT-L}$,
7 $V_{LIMIT-H}$. AND THE NUMBERS ON THE RIGHT-HAND SIDE CORRESPOND
8 TO THE MIN, TYP, MAX FOR THOSE LEVELS.

9 **Q** RIGHT. WHAT I ASKED WAS THE VALUE CHANGES, $V_{LIMIT-L}$ AND
03:18:52 10 $V_{LIMIT-H}$, ARE DIFFERENT. AND THAT REPRESENTS THAT THE CURRENT
11 LIMIT PARAMETER CHANGES WHEN THE INPUT GOES FROM HIGH LINE TO
12 LOW LINE. RIGHT?

13 (DOCUMENT DISPLAYED)

14 **A** SURE.

03:19:06 15 **Q** NOW, IN YOUR DIRECT TESTIMONY, DR. WEI, YOU DID NOT
16 DISPUTE DR. KELLEY'S ANALYSIS OF THE INTERNAL CIRCUIT
17 SCHEMATICS THAT SHOW HOW THE INTERNAL SIGNAL LIMIT WAS
18 GENERATED IN RESPONSE TO THE SIGNAL AT THE HV PIN. FAIR?

19 **A** WITH RESPECT TO THE HV PIN, NO, I DID NOT.

03:19:25 20 **Q** IN FACT IN YOUR DIRECT TESTIMONY YOU DIDN'T SHOW THE JURY
21 ANY OF THE SCHEMATICS FOR THE ACCUSED REPRESENTATIVE PARTS.
22 RIGHT?

23 **A** WE DIDN'T LOOK AT ANY SCHEMATICS. THERE WERE SOME
24 SCHEMATICS OF THE POWER SUPPLY WITH THE EXTERNAL COMPONENTS,
03:19:41 25 BUT NOT THE INTERNAL CHIP SCHEMATICS.

03:19:44 1 Q CORRECT.

2 MR. POLLACK: MR. SAYERS, CAN YOU BRING UP NEXT THE
3 BROWNOUT AND CONSTANT POWER LIMITED HP PIN SECTION? THIS IS
4 ON PAGE 12.

03:19:54 5 (DOCUMENT DISPLAYED)

6 Q AND DR. WEI, I WANT TO REFER YOU TO SOME POINTS HERE. IT
7 SAYS (AS READ):

8 "UNLIKE PREVIOUS PWM CONTROLLERS, FAN6747'S HV PIN
9 ISN'T ONLY USED FOR STARTUP..."

03:20:12 10 SO DO YOU AGREE THAT HV PIN IS USED FOR STARTUP, AND SOME
11 OTHER THINGS TOO, RIGHT?

12 A THAT IS WHAT IT SAYS, YEAH.

13 Q (AS READ)

14 "IT CAN ALSO DETECT THE AC LINE VOLTAGE TO PERFORM
03:20:22 15 BROWNOUT FUNCTION AND SET THE CURRENT LIMIT LEVEL."

16 DO YOU SEE THAT?

17 A THAT'S WHAT IT SAYS.

18 Q RIGHT. SO ONE OF THE THINGS THE HV PIN CAN DO IS IT CAN
19 DETECT THE AC LINE VOLTAGE TO SET THE CURRENT LIMIT LEVEL.

03:20:37 20 THAT'S WHAT THE DATASHEET SAYS.

21 A CORRECT.

22 MR. POLLACK: AND MR. SAYERS, CAN WE TURN TO PAGE 13
23 OF THE 6747 DATASHEET, AND THE CONSTANT OUTPUT POWER LIMIT
24 SECTION.

03:20:47 25 (DOCUMENT DISPLAYED)

03:20:47 1 **BY MR. POLLACK:**

2 **Q** NOW, YOU LOOKED AT A PART OF THIS WHEN YOU WERE ON DIRECT,

3 CORRECT?

4 **A** YES.

03:20:51 5 **Q** I WANT TO DIRECT YOU TO A DIFFERENT PART. DOWN HERE, IT

6 SAYS (AS READ):

7 "TO COMPENSATE THIS VARIATION FOR A WIDE AC INPUT

8 RANGE, A POWER LIMITER IS CONTROLLED BY THE HV PIN TO

9 SOLVE THE UNEQUAL POWER-LIMIT PROBLEM."

03:21:06 10 DO YOU SEE THAT?

11 **A** YES, I DO.

12 **Q** AND THAT'S THE FUNCTION OF THE HV PIN WE WERE JUST TALKING

13 ABOUT FOR SETTING THE CURRENT LIMIT. CORRECT?

14 **A** THAT IS -- YEAH. THAT'S RELATED TO WHAT WE WERE TALKING

03:21:18 15 ABOUT WITH RESPECT TO THE HV PIN.

16 **Q** RIGHT. AND IT SAYS THAT THAT THE RESULTS -- THAT:

17 "THIS RESULTS IN A LOWER CURRENT LIMIT AT HIGH-LINE

18 INPUT THAN AT LOW-LINE INPUT."

19 RIGHT?

03:21:29 20 **A** THAT IS WHAT IT SAYS.

21 **Q** OKAY.

22 **MR. POLLACK:** MR. SAYERS, CAN YOU PLEASE BRING UP THE

23 FUNCTIONAL BLOCK DIAGRAM WHICH IS ON PAGE 2 OF THE DATASHEET?

24 (DOCUMENT DISPLAYED)

25

03:21:42 1 **BY MR. POLLACK:**

2 **Q** NOW, DR. WEI, WE DIDN'T LOOK AT THIS WHEN YOU WERE ON

3 DIRECT EITHER, RIGHT?

4 (WITNESS EXAMINES DOCUMENT)

03:21:51 5 **A** OH, YEAH.

6 **MR. POLLACK:** MR. SAYERS CAN YOU ZOOM IN, ABOUT THIS

7 QUARTER OF THE BLOCK DIAGRAM, INCLUDING THE SENSE PIN?

8 (DOCUMENT DISPLAYED)

9 **MR. POLLACK:** YES, THANK YOU.

03:22:03 10 **BY MR. POLLACK:**

11 **Q** SO, DR. WEI THERE IS A SENSE INPUT THERE, AT PIN 6. DO

12 YOU SEE THAT?

13 **A** I DO.

14 **Q** AND PIN 6 IS THE CURRENT SENSE INPUT, RIGHT?

03:22:15 15 **A** THAT IS -- YES. THAT'S THE CURRENT SENSE PIN AS DESCRIBED

16 IN THE PIN DEFINITIONS.

17 **Q** RIGHT. AND YOU AGREE THAT THE SIGNAL AT THIS CURRENT

18 SENSE PIN IS A VOLTAGE THAT'S PROPORTIONAL TO THE CURRENT

19 FLOWING THROUGH THE POWER SWITCH WHEN THE SWITCH IS ON.

03:22:32 20 CORRECT?

21 **A** THE -- YES, IT IS A VOLTAGE, AND THERE IS -- WELL, ONCE

22 YOU ATTACH THE POWER SWITCH, AND YOU ATTACH THE SENSE

23 RESISTOR, THEN WE KNOW FROM OHM'S LAW THERE IS A VOLTAGE AND

24 CURRENT RELATIONSHIP.

03:22:47 25 **Q** RIGHT. AND THE VOLTAGE AT THAT PIN, WHEN IT'S SET UP LIKE

03:22:51 1 IT IS IN THE TYPICAL APPLICATION DIAGRAM, WILL BE PROPORTIONAL
2 TO THE CURRENT FLOWING THROUGH THE POWER SWITCH WHEN THE
3 SWITCH IS ON. RIGHT?

4 **A** PROPORTIONAL WITH RESPECT TO THAT RESISTOR.

03:23:03 5 **Q** AND THIS SENSE SIGNAL IS THE INPUT, IS ONE OF THE INPUTS
6 TO A COMPARATOR LABELED THE "CURRENT LIMIT COMPARATOR," RIGHT?

7 **A** YES.

8 **Q** AND THERE'S ANOTHER SOFT-START INPUT WE ARE GOING TO PUT
9 THAT ASIDE FOR THE SECOND. THERE IS A NEGATIVE INPUT. YOU
03:23:20 10 UNDERSTAND THAT TO BE THE THRESHOLD INPUT FOR THE CURRENT
11 LIMIT COMPARATOR, RIGHT?

12 **A** UH, YEAH. LET ME JUST VERIFY BECAUSE WE HAVE ZOOMED IN SO
13 LET ME JUST ARBITRATE TRACE WHERE THAT IS FROM. OKAY.

14 **Q** AND YOU DON'T DISPUTE THAT THAT THRESHOLD INPUT TO THE
03:23:36 15 CURRENT LIMIT COMPARATOR CHANGES IN RESPONSE TO THE CHANGES IN
16 THE INPUT VOLTAGE OF THE POWER SUPPLY. RIGHT?

17 **A** YES.

18 **Q** OKAY. AND YOU WOULD ALSO AGREE THAT WHEN THE SENSE
19 VOLTAGE ACROSS THE SENSE RESISTOR REACHES THE THRESHOLD OF THE
03:23:51 20 CURRENT LIMIT COMPARATOR, THAT WILL CAUSE THE -- THIS POWER
21 SWITCH TO BE TURNED OFF. RIGHT?

22 **A** SO WHEN THAT VOLTAGE EXCEEDS THE OTHER VOLTAGE, THEN
23 THERE'S CIRCUITRY THAT TURNS THE POWER SWITCH OFF.

24 **Q** OKAY. NOW I WANT TO LOOK AT THE '908 PATENT ITSELF,
03:24:10 25 DR. WEI, WHICH IS PX 2. BUT I WANT TO LOOK AT A COUPLE OF

03:24:14 1 YOUR SLIDES FIRST.

2 **MR. POLLACK:** DDX 495, PLEASE, MR. SAYERS?

3 (DOCUMENT DISPLAYED)

4 **BY MR. POLLACK:**

03:24:21 5 **Q** YOU RECALL THAT YOU TALKED ABOUT THIS SLIDE ON YOUR
6 DIRECT, RIGHT?

7 **A** YES, I DO.

8 **Q** AND YOU REFERRED TO THIS PIECE HERE (INDICATING) AS A
9 CURRENT COMPARATOR, AND YOU SAID THAT'S SHOWN IN FIGURE 4 OF
03:24:30 10 THE '908 PATENT. RIGHT?

11 **A** I BELIEVE THAT'S FIGURE 4. YEAH.

12 **Q** SO LET'S LOOK AT DDX 6.

13 (DOCUMENT DISPLAYED)

14 **Q** IT SHOWS FIGURE 4, RIGHT?

03:24:42 15 **A** RIGHT.

16 **Q** AND THAT CURRENT COMPARATOR YOU TALKED ABOUT, THAT'S THAT
17 PIECE UP HERE IN THIS UPPER RIGHT CORNER (INDICATING).
18 RIGHT?

19 **A** YEAH, I THINK I DESCRIBED IT WHEN I WAS TALKING ABOUT IT,
03:24:52 20 I DID SAID WAS IN THE UPPER RIGHT CORNER. YEAH.

21 **Q** THAT IS NOT THE PORTION OF THE CIRCUIT THAT IMPLEMENTS THE
22 CURRENT LIMIT ADJUSTMENT FEATURE, RIGHT?

23 **A** THAT IS NOT. I WAS IDENTIFYING THE CURRENT COMPARATOR
24 THERE.

03:25:05 25 **Q** THAT RELATES TO AN UNDER-VOLTAGE FEATURE, IT'S NOT REALLY

03:25:08 1 AT ISSUE HERE. RIGHT?

2 **A** ONE OF THEM IS UNDER-VOLTAGE FEATURE. I BELIEVE THE OTHER

3 ISN'T. THERE'S TWO OF THEM SIDE BY SIDE. I DON'T RECALL

4 EXACTLY WHICH IS WHICH. BUT, ONE OF THEM IS THE UNDER-VOLTAGE

03:25:20 5 FEATURE.

6 **Q** AND THE OTHER IS THE OVER-VOLTAGE FEATURE?

7 **A** THAT'S RIGHT.

8 **Q** SO I WANT TO FOCUS YOU ON THE OTHER PORTIONS. THIS FIGURE

9 SHOWS A CURRENT LIMIT ADJUSTMENT SIGNAL (INDICATING). YOU

03:25:30 10 DON'T DISPUTE THAT THAT IS THE CURRENT LIMIT ADJUSTMENT SIGNAL

11 AS DESCRIBED IN THE PATENT, RIGHT?

12 **A** THAT'S CORRECT.

13 **Q** AND THAT'S A VOLTAGE THAT'S INPUT TO THIS VOLTAGE

14 COMPARATOR, CORRECT?

03:25:41 15 **A** THAT'S CORRECT.

16 **Q** AND THE OTHER INPUT TO THAT COMPARATOR, HERE (INDICATING),

17 IS A SENSE VOLTAGE THAT IS PROPORTIONAL TO THE CURRENT FLOWING

18 THROUGH THE POWER SWITCH. CORRECT?

19 **A** YEAH, I THINK I'LL AGREE WITH THAT. IT IS A RESISTOR

03:26:00 20 DIVIDER THAT IS CONNECTED TO, I BELIEVE, THE POSITIVE INPUT OF

21 THAT COMPARATOR. AND IF WE TRACE THAT AROUND, THERE IS A

22 DRAIN NODE, YEAH.

23 **Q** AND, YOU WOULD AGREE THAT WHEN THE SENSE VOLTAGE EXCEED

24 THE THRESHOLD SET BY THE CURRENT LIMIT ADJUSTMENT SIGNAL, THE

03:26:19 25 SWITCH, THE POWER SWITCH WILL BE TURNED OFF (INDICATING).

03:26:23 1 RIGHT?

2 **A** IF I LOOK THROUGH THAT, YEAH.

3 **Q** OKAY AND THE '908 PATENT SAYS THAT USING THIS COMPARATOR

4 CIRCUIT, THE SWITCH WILL BE TURNED OFF WHEN THE AMOUNT OF

03:26:33 5 CURRENT FLOWING THROUGH THE POWER SWITCH RISES ABOVE THE

6 THRESHOLD. RIGHT?

7 **A** THIS IS, YOU ARE TALKING ABOUT WITHIN THE PATENT, IN THE

8 SPECIFICATION.

9 **Q** -- YES.

03:26:42 10 **A** I THINK SO.

11 **Q** BUT IN YOUR OPINION, THIS DISCLOSED EMBODIMENT IF FIGURE 4

12 IS NOT COVERED BY THE ASSERTED CLAIM AS YOU'VE APPLIED IT IN

13 THIS CASE. RIGHT?

14 **A** CORRECT.

03:26:57 15 **Q** YOUR OPINION IS THAT THE EMBODIMENT DISCLOSED IN FIGURE 7

16 OF THE '908 PATENT IS ALSO NOT COVERED BY THE ASSERTED CLAIMS,

17 RIGHT?

18 **A** THAT'S CORRECT.

19 **Q** AND THE REASON FOR THAT OPINION IS BECAUSE THOSE

03:27:10 20 EMBODIMENTS COMPARE VOLTAGES THAT REPRESENT CURRENTS RATHER

21 THAN COMPARING CURRENTS THEMSELVES. FAIR?

22 **A** IT'S -- THE CLAIM REQUIRES -- AND THIS IS THE CLAIM

23 CONSTRUCTION FOR "CURRENT LIMIT" -- A VALUE OF CURRENT.

24 **Q** SO, IT'S YOUR ASSERTION THAT THE CLAIMS REQUIRE

03:27:29 25 SPECIFICALLY COMPARING CURRENTS.

03:27:31 1 **A** A VALUE OF CURRENT.

2 **Q** AND THERE IS NO EMBODIMENT SHOWN IN THE '908 PATENT THAT

3 INCLUDES A CIRCUIT THAT COMPARES TWO CURRENTS. RIGHT?

4 **A** THERE'S -- WELL, THE CURRENT COMPARATOR THAT WE JUST

03:27:46 5 POINTED OUT, THERE'S THAT CIRCUITRY.

6 **Q** WITH REGARD TO IMPLEMENTING THE CURRENT LIMIT FEATURE.

7 **A** WITH RESPECT TO THE CURRENT LIMIT FEATURE, IT DOESN'T USE

8 THOSE CIRCUIT ELEMENTS.

9 **Q** SO, THE WAY YOU'VE APPLIED THE CLAIMS OF THE '908 PATENT,

03:28:02 10 THEY DON'T COVER ANY EMBODIMENT THAT IS DESCRIBED IN THE

11 PATENT. RIGHT?

12 **A** IN TERMS OF -- WE ARE TALKING ABOUT CLAIM 26?

13 **Q** YES.

14 **A** YES.

03:28:17 15 **Q** I WANT TO ALSO ASK YOU SOMETHING ABOUT -- JUST CLARIFY,

16 YOU TALKED ABOUT SOME FILE HISTORY AND AN AGIMAN PATENT, DO

17 YOU RECALL THAT?

18 **A** YES, I DO.

19 **MR. POLLACK:** CAN I HAVE DDX 493, PLEASE?

03:28:34 20 (DOCUMENT DISPLAYED)

21 **BY MR. POLLACK:**

22 **Q** OKAY. DO YOU RECALL THIS SLIDE?

23 **A** I DO.

24 **Q** DOWN THERE IT'S A LITTLE HARD TO READ, THAT SAYS "'908

03:28:46 25 PARENT FILE HISTORY," RIGHT?

03:28:48 1 **A** YES.

2 **Q** YOU UNDERSTAND THAT THIS DISCUSSION DID NOT OCCUR DURING
3 THE PROSECUTION OF THE '908 PATENT, ITSELF, RIGHT?

4 **A** SO MY UNDERSTANDING IS THE '908 PATENT IS -- IS A CHILD OF
03:29:00 5 A PARENT PATENT. AND IN THIS FAMILY OF PATENTS, I BELIEVE
6 THERE'S ELEVEN PATENTS IN THAT FAMILY.

7 **Q** OKAY. SO, BUT THIS DISCUSSION HERE (INDICATING), YOU
8 WOULD AGREE WITH ME, IS NOT PART OF THE FILE HISTORY OF THE
9 '908 PATENT ITSELF. RIGHT?

03:29:17 10 **A** IT'S PART OF THE PARENT -- I DON'T RECALL WHAT THE NUMBER
11 FOR THE PARENT PATENT IS. I THINK IT'S '997, MAYBE, BUT I
12 DON'T RECALL THE EXACT NUMBER.

13 **Q** NOW, THIS DISCUSSION HERE THAT YOU POINTED TO, THAT WAS
14 NOT ABOUT CLAIM 26 OF THE '908 PATENT, RIGHT?

03:29:39 15 **A** NOT ABOUT CLAIM 26 OF '908.

16 **Q** AND IN FACT IT IS ABOUT A LIMITATION OF A CLAIM THAT DOES
17 NOT APPEAR IN THE ASSERTED CLAIMS OF THE '908. CORRECT?

18 **A** IT IS -- THIS DISCUSSION IS WITH RESPECT TO WHAT POWER
19 INTEGRATIONS PRESENTED TO THE PATENT OFFICE IN TERMS OF
03:29:57 20 CURRENT AND VOLTAGE. AND, SPECIFICALLY, IF I READ THIS AGAIN,
21 I DO NOT BELIEVE THIS IS EXACTLY WITH RESPECT TO CLAIM 26.

22 **Q** OKAY.

23 **MR. POLLACK:** DO YOU HAVE DX5123, MR. SAYERS? CAN WE
24 LOOK AT THE ACTUAL EXHIBIT AT PAGE 30?

03:30:27 25 (DOCUMENT DISPLAYED)

03:30:28 1 **BY MR. POLLACK:**

2 **Q** AND I BELIEVE THIS IS THE PORTION THAT YOU HIGHLIGHTED IN
3 YOUR SLIDE. I WANT YOU TO GO UP TO THE PORTION RIGHT ABOVE
4 THAT.

03:30:34 5 (DOCUMENT DISPLAYED)

6 **Q** DO YOU SEE WHERE IT SAYS HERE (AS READ):

7 "EXAMPLE INDEPENDENT CLAIM 1 EXPRESSLY RECITES A
8 POWER SUPPLY CONTROLLER CIRCUIT THAT INCLUDES 'A
9 CURRENT INPUT CIRCUIT COUPLED TO RECEIVE A CURRENT
03:30:47 10 REPRESENTATIVE OF AN INPUT VOLTAGE, THE CURRENT INPUT
11 CIRCUIT TO GENERATE AN ENABLE/DISABLE SIGNAL WHEN THE
12 CURRENT CROSSES A THRESHOLD.'"

13 DO YOU SEE THAT?

14 **A** I DO.

03:30:59 15 **Q** THAT LANGUAGE DOESN'T APPEAR ANYWHERE IN THE CLAIMS THAT
16 ARE AT ISSUE IN THIS CASE. RIGHT IN?

17 **A** SO, SO THIS IS -- SO THE -- THE TEXT THAT WE SAW BELOW IN
18 AGIMAN IS CLEARLY WITH RESPECT TO THE PORTION THAT WE'VE
19 TALKED -- THAT WE'VE HIGHLIGHTED HERE. AND IT'S TALKING ABOUT
03:31:22 20 THIS CURRENT INPUT CIRCUIT.

21 AND IT IS -- SO WHAT HAPPENED, AS I UNDERSTAND, IS THAT
22 AGIMAN WAS PRESENTED AS A PRIOR ART. AND WHAT POWER
23 INTEGRATIONS DID WAS TO LOOK THROUGH AGIMAN AND ARGUE THAT
24 CURRENT AND VOLTAGE ARE DIFFERENT. AND THEREFORE, AGIMAN DOES
03:31:44 25 NOT INVALIDATE -- OR NOT INVALIDATE, I GUESS, IT'S NOT A

03:31:50 1 REFERENCE THAT PREVENTS ONE OF THE CLAIMS TO BE GREEN MODE.

2 Q DR. WEI, ISN'T IT TRUE THAT WHAT POWER INTEGRATIONS WAS

3 SAYING IS THAT AGIMAN DOESN'T SHOW WHAT THEY RECITED IN THIS

4 CLAIM (INDICATING)?

03:32:04 5 A THAT'S CORRECT. AND, THE REASON FOR IT IS WITH RESPECT TO

6 HOW CURRENT AND VOLTAGES ARE DIFFERENT.

7 Q AND DR. WEI, THE CLAIMS IN THIS CASE RECITE A

8 MULTI-FUNCTION CIRCUIT, DO THEY NOT?

9 A YES, THEY DO.

03:32:17 10 Q AND NOT A CURRENT INPUT CIRCUIT.

11 A IT'S -- IT'S NOT A CURRENT INPUT CIRCUIT AS DESCRIBED IN

12 THIS LANGUAGE HERE. BUT WE'RE ALSO STILL TALKING ABOUT

13 CURRENTS AND VOLTAGES.

14 Q DR. WEI, IN YOUR NONINFRINGEMENT OPINION WITH REGARD TO

03:32:34 15 THE '908 PATENT, YOU DID NOT RELY ON ANY TESTING OF ANY

16 FAIRCHILD PRODUCTS IN FORMING YOUR OPINIONS. CORRECT?

17 A THAT'S CORRECT. THE '908 PATENT AND IF WE LOOK AT CLAIMS

18 26 AND 27, IF WE LOOK AT THE PREAMBLE IT SAYS "A POWER

19 CONTROLLER CIRCUIT," I BELIEVE, IT DOESN'T SAY "POWER SUPPLY."

03:32:57 20 AND SO, I DIDN'T FEEL I NEEDED TO DO TESTING WITH RESPECT TO

21 THE '908.

22 Q WELL, LET'S MOVE ON TO THE '079 PATENT.

23 A OKAY.

24 Q AND LET'S TALK ABOUT YOUR OPINIONS ABOUT NONNER

03:33:11 25 NONINFRINGEMENT THERE. FIRST OF ALL YOU PROVIDED SOME

03:33:14 1 TESTIMONY ABOUT THE SWITCH ELEMENT. DO YOU RECALL THAT?

2 **A** SWITCH ELEMENT. YES. THERE WAS NUMEROUS TESTIMONY.

3 **Q** OKAY. SO, BUT YOU WOULD AGREE THAT THE ACCUSED DISCRETE

4 CONTROLLERS MUST BE USED WITH A POWER SWITCH, OTHERWISE THEY

03:33:31 5 WOULDN'T WORK IN A POWER SUPPLY. RIGHT?

6 **A** I AGREE THAT THE POWER SUPPLY REQUIRES AN EXTERNAL POWER

7 SWITCH AS WE HAD DISCUSSED. BUT THAT POWER SWITCH AND THAT

8 SENSE RESISTOR IS OUTSIDE OF THE ACCUSED PRODUCTS.

9 **Q** BUT YOU CAN'T USE THE CONTROLLER IN POWER SUPPLY WITHOUT

03:33:53 10 THE POWER SWITCH. RIGHT?

11 **A** RIGHT. YOU NEED THOSE POWER -- THAT POWER SWITCH AND

12 RESISTOR.

13 **Q** RIGHT. IN FACT IN ORDER TO USE THE DISCRETE CONTROLLERS

14 AND HAVE A POWER SUPPLY THAT DOES THE THINGS THAT POWER

03:34:04 15 SUPPLIES DO, YOU NEED A POWER SWITCH. RIGHT?

16 **A** YES.

17 **Q** SO I WANT TO TALK A LITTLE BIT ABOUT THIS TESTING THAT YOU

18 DID, THAT YOU HAD BE DONE. SO IN FORMING YOUR OPINIONS ON THE

19 DISPUTED ELEMENTS OF THE '079 PATENT CLAIMS, YOU RELIED ON

03:34:22 20 SOME DATA THAT WAS PROVIDED BY FAIRCHILD ABOUT PRODUCT

21 TESTING. RIGHT?

22 **A** I THINK THAT'S FAIR, YEAH.

23 **Q** OKAY. AND, I JUST WANT TO SEE IF I CAN CLARIFY SOME OF

24 THE FACTS RELATED TO THIS. AND THE TIMELINE, IN PARTICULAR.

03:34:39 25 **A** OKAY.

03:34:40 1 Q FIRST OF ALL, YOU SIGNED YOUR REPORT CONTAINING YOUR
2 NON-INFRINGEMENT OPINIONS ON AUGUST 22 OF LAST YEAR. RIGHT?

3 A THAT IS CORRECT.

4 Q AND YOU FIRST SUGGESTED IN AN EMAIL TO FAIRCHILD'S COUNSEL
03:34:54 5 ON JULY 24TH THAT THERE WAS SOME TESTING THAT YOU WOULD LIKE
6 TO GET DONE. RIGHT?

7 A THAT'S CORRECT.

8 Q BUT YOU DIDN'T PERSONALLY SEND ANY TESTING INSTRUCTIONS TO
9 FAIRCHILD'S EMPLOYEES; YOU JUST COMMUNICATED THROUGH THE
03:35:08 10 ATTORNEYS. RIGHT?

11 A THAT'S CORRECT. I DIDN'T KNOW EXACTLY WHO, TO WHOM I
12 WOULD SEND THAT EMAIL. AND SO IT WAS RELAYED TO FAIRCHILD
13 THROUGH THE ATTORNEYS.

14 Q AND AFTER SENDING OFF THE EMAIL TO THE LAWYERS ON
03:35:21 15 JULY 24TH, THE NEXT THING THAT HAPPENED FROM YOUR PERSPECTIVE
16 WAS YOU RECEIVED SOME POWERPOINT REPORTS IN AN EMAIL ON
17 AUGUST 17TH FROM COUNSEL (INDICATING). RIGHT?

18 A I HAD SOME CONVERSATIONS WITH COUNSEL AND THEN THERE WAS
19 AN -- AFTER SENDING THAT EMAIL, I BELIEVE YOU'RE CORRECT THAT
03:35:43 20 THE NEXT EMAIL CAME BACK ON AUGUST -- I FORGET EXACTLY WHICH
21 DATE. AUGUST 18?

22 Q 17 SOUND RIGHT?

23 A AUGUST 17?

24 Q SO BETWEEN THE TIME YOU SENT THE EMAIL ON JULY 24TH AND
03:36:02 25 RECEIVING SOME REPORTS BACK FROM COUNSEL IN AN EMAIL ON AUGUST

03:36:08 1 17, YOU DON'T RECALL SPEAKING WITH ANY OF THE FAIRCHILD
2 ENGINEERS ABOUT ANY TESTING THAT THEY WERE DOING. RIGHT?
3 **A** I DID NOT RECALL. I DO NOT RECALL.
4 **Q** BUT YOU KNOW THAT W.H. HUANG OF FAIRCHILD TESTIFIED THAT
03:36:23 5 BETWEEN JULY 25TH AND AUGUST 20TH, THERE WERE NO
6 COMMUNICATIONS FROM YOU GIVING ADDITIONAL INSTRUCTIONS FOR THE
7 TESTING. YOU RECALL THAT TESTIMONY, RIGHT?
8 **A** IN TERMS OF A DIRECT COMMUNICATION BETWEEN THE TWO OF US?
9 **Q** WELL, EITHER FROM YOU OR THE LAWYERS. YOU HEARD HIM
03:36:40 10 TESTIFY ABOUT THAT, RIGHT?
11 **A** WELL, WELL, I'M NOT SURE, BUT I'LL TAKE YOUR WORD FOR IT.
12 I'M NOT 100 PERCENT SURE IF THAT WAS THE CASE.
13 **Q** OKAY, WELL, I MEAN THE JURY HEARD HIS TESTIMONY, SO --
14 **A** GREAT.
03:36:54 15 **Q** NOW, YOU DIDN'T PERSONALLY PERFORM ANY OF TESTING THAT YOU
16 RELY ON IN FORMING YOUR OPINIONS, RIGHT IF?
17 **A** NO. THE TESTING WAS DONE IN TAIWAN. AND, I WAS EITHER IN
18 BOSTON OR SOMEWHERE IN THE U.S.
19 **Q** SO, FAIR ENOUGH, YOU DIDN'T PERSONALLY WITNESS ANY OF THE
03:37:11 20 TESTING THAT WAS DONE BY FAIRCHILD THAT YOU LATER RELIED ON.
21 **A** THAT'S CORRECT.
22 **Q** AND YOU DIDN'T SPEAK WITH THE FAIRCHILD EMPLOYEES THAT
23 WERE DOING THE TESTING WHILE IT WAS ACTUALLY HAPPENING.
24 CORRECT?
03:37:21 25 **A** IN SITU, NO. THAT'S CORRECT.

03:37:24 1 Q SO YOU CANNOT PERSONALLY VERIFY ANY OF THE TEST CONDITIONS
2 OR HOW THE RESULTS WERE GENERATED BECAUSE YOU WEREN'T
3 PERSONALLY PRESENT. RIGHT?

4 A I GOT THE TEST RESULTS, AND I ALSO GOT A DOCUMENT THAT
03:37:42 5 CONTAINS THE PHOTOGRAPHS OF THE TEST SETUP, INFORMATION
6 REGARDING, YOU KNOW, THE EQUIPMENT THAT WAS USED AND THINGS
7 LIKE THAT. AND THEN, BASED ON THAT, I ALSO LOOKED AT THE
8 RESULTS. AND SO I WAS LOOKING AT THE RESULTS AND SEEING HOW
9 IT MATCHED UP WITH MY UNDERSTANDING. BUT, I WASN'T PHYSICALLY
03:38:00 10 THERE.

11 Q OKAY. SO, AFTER GETTING THESE POWERPOINT REPORTS ON
12 AUGUST 17TH, YOU THEREAFTER HAD A PHONE CALL, RIGHT, ON
13 AUGUST 20TH, WITH MR. HUANG AND SOME OF FAIRCHILD'S LAWYERS
14 ABOUT WHAT WAS IN THOSE REPORTS. RIGHT?

03:38:17 15 A YES.

16 Q AND THAT WAS THE ONE TIME BEFORE YOU SERVED YOUR REPORT
17 THAT YOU SPOKE TO MR. HUANG. RIGHT?

18 A I THINK THAT'S CORRECT.

19 Q AND THEN, CAME THE DAY THAT THE REPORT WAS DUE, RIGHT,
03:38:32 20 AUGUST 22ND?

21 A CORRECT.

22 Q AND ON THAT LAST DAY, YOU RECEIVED SOME UPDATED REPORTS.
23 RIGHT?

24 A I RECEIVED SOME UPDATED POWERPOINTS OR PDF FILES.

03:38:45 25 Q OKAY. AND, YOU UNDERSTOOD THAT, FOR EXAMPLE, THE FAN103

03:38:55 1 POWERPOINT HAD BEEN CHANGED BY MR. HUANG BETWEEN THE 17TH AND
2 THE 22ND. RIGHT?

3 **A** THERE WAS -- IF I RECALL CORRECTLY, IN THAT POWERPOINT
4 PRESENTATION, OR SET OF SLIDES, THERE WAS OTHER TEST RESULTS
03:39:15 5 INCLUDED AND THEN THERE WERE SOME OTHER ONES THAT WERE
6 REMOVED.

7 **Q** OKAY, BUT YOU KNEW THAT AT THE TIME. RIGHT?

8 **A** WELL, I HAD BOTH AT THE TIME.

9 **Q** OKAY. AND ALSO, THAT SAME DAY, YOU RECEIVED THE REPORTS
03:39:27 10 FOR THE SG 6841, THE SG 5841, AND THE SG 5841J. RIGHT? IN A
11 SERIES OF EMAILS FROM FAIRCHILD'S COUNSEL.

12 **A** YES, THERE WAS KIND OF THE FINAL SET OF THOSE CHARTS THAT
13 I RECEIVED. I THINK THAT WAS -- I DO REMEMBER THE SIX OR
14 SEVEN EMAILS THAT CAME IN. AND, I THINK -- I WOULD HAVE TO
03:39:53 15 CHECK MY IN BOX AGAIN BUT I THINK THAT'S RIGHT.

16 **Q** OKAY. AND THEN, ON THAT SAME DAY, YOU ELECTRONICALLY
17 SIGNED YOUR EXPERT REPORT WHICH ATTACHED VARIOUS POWERPOINT
18 SLIDES, DECKS. RIGHT?

19 **A** THAT'S CORRECT.

03:40:10 20 **Q** AND IN THE REPORT THAT YOU SIGNED ON AUGUST 22ND, THE
21 REPORTS INDICATED THAT THE TESTING FOR THE SG 6841 AND 5841
22 HAD ALL OCCURRED ON AUGUST 1ST. RIGHT?

23 **A** YOU KNOW, LOOKING, HAVING BEEN SITTING HERE, LOOKING AT
24 ALL THE DEMONSTRATIVES AND DISCUSSIONS, THAT'S WHAT THOSE
03:40:35 25 DATES WERE. TO BE HONEST, WHEN I WAS LOOKING THROUGH THE

03:40:39 1 RESULTS, I DON'T THINK I EVEN REGISTERED WHAT DATES THEY WERE.

2 Q OKAY. BUT YOU IN FACT LEARNED, JUST A FEW WEEKS AGO, THAT

3 THE -- THE DATA SETS IN THOSE POWERPOINTS ACTUALLY INCLUDED

4 DATA THAT WAS CAPTURED ON A NUMBER OF DIFFERENT DAYS. RIGHT?

03:40:57 5 A OH, YEAH. THAT'S COMMON.

6 Q AND, THAT WAS TRUE FOR ALL OF THE DIFFERENT REPORTS.

7 CORRECT?

8 A I THINK SO. BASED ON THE DISCUSSIONS THAT WE HEARD THIS

9 MORNING AND YESTERDAY WITH MR. W.H. HUANG, I THINK IT WAS

03:41:14 10 ACTUALLY FOR ALL OF THEM. I MEAN, IN THE WHOLE TESTING

11 PROCESS, YOU DON'T TYPICALLY DO IT ALL IN ONE DAY. IT -- IT

12 DOES TAKE A COUPLE OF DAYS. SOMETIMES IT TAKES WEEKS OR

13 MONTHS.

14 Q OKAY. BUT, WHEN YOU ACTUALLY SIGNED YOUR REPORT, AT THAT

03:41:30 15 TIME, YOU DIDN'T KNOW THAT THE DATA SETS THAT WERE SHOWN IN

16 THOSE POWERPOINTS HAD BEEN PERFORMED OVER MANY DAYS AND THAT

17 THINGS HAD BEEN SORT OF SWAPPED IN AND OUT AT MR. HUANG'S

18 DIRECTION. FAIR?

19 A YEAH. IT DIDN'T REALLY MAKE A DIFFERENCE TO ME.

03:41:47 20 Q AND YOU DIDN'T KNOW THAT BECAUSE MR. HUANG DIDN'T TELL

21 YOU. RIGHT?

22 A MR. HUANG DID NOT TELL ME.

23 Q NOW, DR. WEI, IN YOUR DIRECT, YOU ALSO TALKED ABOUT TEST

24 INSTRUCTIONS THAT WERE INCLUDED IN YOUR EXPERT REPORT. DO YOU

03:42:05 25 RECALL THAT?

03:42:05 1 **A** YES, I DO.

2 **Q** AND, I BELIEVE YOU SAID THAT THE TESTING THAT FAIRCHILD
3 DID WAS PERFORMED AT YOUR INSTRUCTIONS. RIGHT?

4 **A** YES.

03:42:16 5 **Q** AND, IS IT TRUE THAT YOU SAID THAT YOUR SPECIFIC
6 INSTRUCTIONS FOR THE TEST WERE PRESENTED IN THAT LIST OR
7 BULLET POINTS IN EXHIBIT B OF YOUR REPORT? IS THAT RIGHT?

8 **A** SO, WHAT I SAID WAS THAT THE EXHIBIT B WAS -- IS
9 COMPREHENSIVE IN TERMS OF THE TEST RESULTS THAT ARE ALSO
03:42:37 10 ATTACHED TO MY REPORT.

11 **Q** WELL, ISN'T IT TRUE, DR. WEI, THAT WHEN YOU WERE ASKED
12 ABOUT THIS IN YOUR DEPOSITION, TAB B OF THE INSTRUCTIONS, YOU
13 SAID THAT YOU HAD PERSONALLY COME UP WITH THE IDEAS FOR THE
14 TESTS THAT WERE DESCRIBED IN THOSE INSTRUCTIONS? RIGHT?

03:43:00 15 **A** I DON'T RECALL EXACTLY WHAT THAT CONVERSATION WAS. WHAT I
16 DO RECALL WAS THAT THE BASIC CONTENT OF THE INSTRUCTIONS FOR
17 THE TESTS WERE CONTAINED IN THOSE INSTRUCTIONS.

18 **Q** WELL, WHY DON'T YOU TAKE A LOOK AT YOUR DEPOSITION EXHIBIT
19 -- YOUR DEPOSITION TRANSCRIPT, SORRY, IT'S IN THAT BINDER
03:43:18 20 (INDICATING). THIS IS FOR YOUR 9-16-13 DEPOSITION. AND I'LL
21 DIRECT YOU TO PAGE 138.

22 **A** TAB B?

23 **Q** IT SHOULD BE LABELED "9-16-13 "--

24 **A** GOT IT.

03:43:41 25 **Q** -- "DEPOSITION." RIGHT?

03:43:42 1 **A** AND WHICH PAGE ARE WE LOOKING AT?

2 **Q** PAGE 1-3-8.

3 (WITNESS EXAMINES DOCUMENT)

4 **A** OKAY.

03:43:53 5 **Q** AND IF YOU LOOK AT LINES 20, TO THE END, AND THEN THE

6 FIRST TWO LINES ON THE NEXT PAGE. CAN YOU READ THOSE?

7 **A** SURE.

8 (WITNESS EXAMINES DOCUMENT)

9 **A** OKAY.

03:44:10 10 **Q** SO, DOES THAT REFRESH YOUR RECOLLECTION THAT WHEN YOU WERE

11 ASKED IN YOUR FIRST DEPOSITION, "DID YOU PERSONALLY COME UP

12 WITH THE IDEAS FOR THE TESTS THAT ARE DESCRIBED IN THE

13 INSTRUCTIONS," YOUR RESPONSE WAS "YES, I THINK SO, AND I

14 REMEMBER WRITING THEM"?

03:44:27 15 **A** YES. SO, YEAH.

16 **Q** BUT THEN, LATER ON, YOU KIND OF CHANGED THAT TESTIMONY

17 WHEN YOU WERE DEPOSED IN FEBRUARY OF THIS YEAR. CORRECT?

18 **A** YES. THE -- IN THE OTHER DEPOSITION THERE WAS MORE

19 JOGGING OF MEMORY, YES.

03:44:45 20 **Q** AND SO WHEN YOU WERE ASKED ABOUT IT IN FEBRUARY, YOU

21 AGREED, FOR EXAMPLE, THAT NOT ALL OF THE TESTS LISTED IN TAB B

22 WERE YOUR ORIGINAL IDEA. RIGHT?

23 **A** I BELIEVE WE DISCUSSED THIS NUMEROUSLY THROUGHOUT TODAY.

24 FOR EXAMPLE, THE ESD/SURGE TEST, THAT WAS A SUGGESTION BY

03:45:06 25 MR. W.H. HUANG. AND, YOU KNOW, I -- AND THAT I HEARD IT, I

03:45:12 1 THOUGHT IT WAS A GOOD IDEA. AND SO I ASKED HIM TO DO IT.

2 Q OKAY. AND THERE WERE -- THERE WERE SOME OTHER
3 CLARIFICATIONS OF THE TEST INSTRUCTIONS THAT ALSO CAME FROM
4 MR. HUANG, RIGHT?

03:45:27 5 A OH, OH. IN TERMS OF, I THINK, WE'RE TALKING ABOUT THE
6 DYNAMIC LOAD TESTS?

7 Q RIGHT. OKAY?

8 A RIGHT.

9 Q NOW ON THE OTHER HAND --

03:45:37 10 A SORRY.

11 Q YOU HAD AT -- I'M SORRY, I DIDN'T MEAN TO CUT YOU OFF.

12 A I'M SORRY. IN TERMS OF THE DYNAMIC LOAD TESTS, WHAT
13 MR. HUANG HAS SAID THAT HE HAD SOME QUESTIONS IN TERMS OF WHAT
14 VALUES TO USE, AND THEREFORE HE SOUGHT CLARIFICATION. AND I
03:45:54 15 DON'T RECALL EXACTLY WHAT HE SAID THEREAFTER.

16 Q OKAY. BUT YOU ONLY SPOKE TO HIM THAT ONE TIME. RIGHT?

17 A ON THE PHONE, I -- BEFORE AUGUST 22ND IT WAS THAT ONE
18 CONVERSATION.

19 Q NOW, YOU HAD ASKED FOR SOME TESTING IN YOUR ORIGINAL EMAIL
03:46:17 20 TO COUNSEL, THE SO-CALLED TEST NO. 3, FOR WHICH YOU NEVER
21 RECEIVED ANY TEST RESULTS. RIGHT?

22 A THAT IS CORRECT.

23 Q AND, I THINK YOU SAID IN YOUR DIRECT, YOU DIDN'T FOLLOW UP
24 ON THOSE TESTS, RIGHT?

03:46:32 25 A THAT'S CORRECT.

03:46:34 1 Q YOU DIDN'T GET RESULTS FOR TEST NO. 3 BECAUSE THE LAWYERS
2 TOLD W.H. NOT TO DO THAT TESTING. RIGHT?

3 A I DON'T -- UM, I DON'T RECALL EXACTLY WHAT HAPPENED. THIS
4 IS WAS SOMETHING THAT WAS A TOPIC OF THE DEPOSITION, THE
03:46:53 5 SECOND DEPOSITION. AND, AT THAT TIME, I DIDN'T QUITE RECALL
6 EXACTLY WHAT HAD HAPPENED.

7 SITTING HERE TODAY, I WAS LISTENING OR SITTING FOR LAST
8 WEEK AND A HALF, WHAT I NOTICED, I REALIZED, REALIZED
9 ESPECIALLY WAS DR. KELLEY HAD DROPPED LIKE SIX OF THE CLAIMS
03:47:15 10 AND SO WE WERE ONLY TALKING ABOUT FOUR, FOUR ASSERTED CLAIMS
11 NOW.

12 AND, IT KIND OF REMINDED ME THAT, OH, I WAS REALLY FOCUSED
13 ON THAT FIXED FREQUENCY CLAIM ELEMENT, AND THE CYCLE SKIPPING
14 CLAIM ELEMENT. AND SO, I JUST WAS NOT PAYING ATTENTION EVEN
03:47:32 15 TO THE LAST ONE. AND THAT INITIAL EMAIL WAS KIND OF MY FIRST
16 ITERATION OF THE TESTS.

17 Q OKAY. SO, IT'S YOUR TESTIMONY THAT YOU KNEW BACK BEFORE
18 YOU DID YOUR REPORT THAT ONLY THE FOUR CLAIMS THAT ARE AT
19 ISSUE IN THE TRIAL WERE THE ONES THAT WERE THE UNIVERSE OF THE
03:47:50 20 CLAIMS? IS THAT WHAT YOU ARE SAYING?

21 A NO. OF COURSE, I COULD NOT KNOW THAT.

22 Q AND YOU DIDN'T KNOW THAT MR. HUANG HAD ASKED MR. CHUEH TO
23 ACTUALLY TO DO TEST 3 FOR A PART, AND THEY HAD SOME RESULTS.
24 YOU WEREN'T AWARE OF THAT WHEN YOU SIGNED YOUR REPORT ON
03:48:08 25 AUGUST 22ND, RIGHT?

03:48:10 1 **A** THAT IS -- THAT IS CORRECT.

2 **Q** SO, DR. WEI, LET'S TALK ABOUT CYCLE SKIPPING FOR A MINUTE.
3 AND, YOUR OPINIONS ON THAT LIMITATION.

4 NOW, YOU TOLD THE JURY THAT YOU BELIEVE THE ACCUSED
03:48:27 5 PRODUCTS DON'T INFRINGE THE '079 PATENT CLAIMS BECAUSE THEY
6 SKIPPED CYCLES. RIGHT?

7 **A** CORRECT.

8 **Q** AND, YOU ARE BASING THAT ON TESTS. RIGHT?

9 **A** CORRECT.

03:48:37 10 **Q** SO, DURING YOUR DIRECT EXAMINATION, YOU DIDN'T SHOW THE
11 JURY ANY OF THE SCHEMATICS, INTERNAL SCHEMATICS FOR THE
12 ACCUSED PRODUCTS, RIGHT?

13 **A** THAT IS CORRECT.

14 **Q** AND SO FOR EXAMPLE, TODAY WE HEARD NO DISCUSSION WITH
03:48:50 15 REFERENCE TO ANY PAGES OF THE SCHEMATICS FOR THE ACCUSED
16 REPRESENTATIVE SG 3842G. RIGHT?

17 **A** THAT IS CORRECT.

18 **Q** AND SIMILARLY, YOU DIDN'T EXPLAIN WITH REFERENCE TO ANY
19 SCHEMATICS WHAT CIRCUITS INSIDE THE SG5841, THAT YOU BELIEVE
03:49:10 20 WOULD CAUSE IT TO SKIP CYCLES. CORRECT?

21 **A** I WAS SHOWING THE TEST RESULTS. AND I WAS NOT -- I DID
22 NOT GO THROUGH THE SCHEMATICS.

23 **Q** OKAY. NOW, WITH REGARD TO THE SG6841, I THINK YOU
24 MENTIONED IT, BUT YOU WOULD AGREE THAT THE DATASHEET FOR THAT
03:49:29 25 PRODUCT DOESN'T MENTION THE -- THE PART SKIPPING CYCLES IN ANY

03:49:33 1 WAY. RIGHT?

2 **A** THE DATASHEET? THAT'S CORRECT.

3 **Q** RIGHT. AND YOU DIDN'T POINT TO ANYTHING IN THE SCHEMATICS

4 OF THE 6841 THAT WOULD, IN YOUR VIEW, DESCRIBE A CIRCUIT THAT

03:49:44 5 WOULD CAUSE THE 6841 PART TO SKIP CYCLES. RIGHT?

6 **A** I JUST OBSERVED IT IN THE TESTS.

7 **Q** OKAY. AND JUST TO CUT TO THE CHASE, THAT'S TRUE OF ALL

8 THE ACCUSED PRODUCTS. YOU DIDN'T POINT TO ANY SCHEMATICS

9 INSIDE THOSE PRODUCTS THAT YOU SAID, "YEAH, THAT'S THE CIRCUIT

03:50:01 10 THAT CAUSED CYCLE SKIPPING." RIGHT?

11 **A** THAT IS CORRECT.

12 **Q** NOW, YOU AGREE THAT CYCLE SKIPPING IN THE '079 PATENT

13 REFERS TO SKIPPING OSCILLATOR CYCLES, RIGHT?

14 **A** YES.

03:50:11 15 **Q** AND, I THINK YOU SAID THIS, BUT NONE OF THE TESTING DATA

16 THAT YOU RELIED ON SHOWS THE ACTUAL OSCILLATOR OUTPUT. RIGHT?

17 **A** AS I DESCRIBED, YOU CAN'T -- THERE ARE -- THERE IS NO PIN

18 THAT HAS THE OSCILLATOR OUTPUT COMING OUT SO YOU CAN'T PROBE

19 IT AND LOOK AT IT. AND THEREFORE -- AND IT'S INSIDE THE CHIP.

03:50:31 20 AND SO, YOU HAVE TO UNDERSTAND HOW THE CHIP OPERATES. BASED

21 ON THE SCHEMATICS, DATASHEETS, ET CETERA.

22 **Q** SO, LET'S LOOK AT IT JUST AN EXAMPLE.

23 **MR. POLLACK:** AND MR. SAYERS, THIS IS FROM DX 5709.

24 BUT I THINK YOU CAN PROBABLY PICK IT UP MORE QUICKLY IF YOU

03:50:52 25 LOOK FOR DX 4549.

03:51:07 1 (DOCUMENT DISPLAYED)

2 **MR. POLLACK:** THAT'S RIGHT, THERE YOU GO.

3 **BY MR. POLLACK:**

4 **Q** SO, YOU SEE --

03:51:14 5 **MR. POLLACK:** AND YOUR HONOR, I GAVE THE TWO NUMBERS
6 BECAUSE THIS IS FROM THAT COLLECTIVE EXHIBIT, 5709.

7 **THE COURT:** AT SOME POINT I MIGHT LIKE TO GET THAT
8 JUST TO KIND OF COMPARE WHERE SOME OF THESE EXHIBITS HAVE BEEN
9 IN THE SEPARATE EXHIBIT GROUP.

03:51:30 10 **MR. POLLACK:** SURE THING, YOUR HONOR.

11 **THE COURT:** OKAY.

12 **BY MR. POLLACK:**

13 **Q** SO, THIS (INDICATING) IS AN OSCILLATOR SCREENSHOT, RIGHT?
14 DO YOU SEE THAT?

03:51:38 15 **A** NO.

16 **Q** NOW, WHEN YOU SIGNED YOUR REBUTTAL REPORT ON AUGUST 22,
17 YOU DID NOT HAVE THE ORIGINAL SCREENSHOTS FROM THE
18 OSCILLOSCOPE IN YOUR POSSESSION, RIGHT?

19 **A** WELL I HAD A SET OF POWERPOINT SLIDES THAT WITHIN THEM HAD
03:52:03 20 SCREENSHOTS FROM THE OSCILLOSCOPE.

21 **Q** RIGHT SO THERE WERE SOME SCREENSHOTS WITH SOME ADDITIONAL
22 COMMENTARY ON IT FOR SOME OF THE SLIDES AND THERE WERE SOME
23 SLIDES WITH PICTURES AND THERE WERE SOME SLIDES WITH PLOTS,
24 BUT THAT'S WHAT YOU GOT?

03:52:17 25 **A** THAT'S CORRECT.

03:52:17 1 Q SO IF YOU WERE TO TAKE A LOOK AT THIS SCREENSHOT, AND IF
2 YOU WERE TO GO TO THE POWERPOINT SLIDE CORRESPONDING TO THIS,
3 THEN ALL OF THIS WAS WITHIN THAT SCREENSHOT. I MEAN, WITHIN
4 THAT POWERPOINT SLIDE.

03:52:31 5 Q DO YOU KNOW WHICH PART TESTING THIS RELATES TO?

6 A I THINK.

7 Q WHICH PART?

8 A THIS IS THE 6841 NO-LOAD CYCLE SKIPPINGS TEST.

9 Q SO THIS IS AT NO LOAD? IS THAT RIGHT?

03:52:47 10 A THAT'S CORRECT.

11 Q OKAY. AND, AGAIN, JUST TO POINT OUT, SO IS THERE'S FOUR
12 TRACES ON THERE AND I BELIEVE YOU EXPLAINED WHY, BUT THERE'S
13 NO OSCILLATOR TRACE SHOWN THERE?

14 A THERE IS NO OSCILLATOR TRACE HERE.

03:53:00 15 Q AND THIS IS NOT THE SURGE TEST, RIGHT? THIS IS NO-LOAD?

16 A THIS IS NOT THE SURGE TEST.

17 Q SO I WANT TO LOOK AT THE SURGE TEST ALSO FOR A MINUTE.
18 AND, AND IF WE CAN BRING UP AN EXAMPLE OF THAT FROM DX 4555.

19 (DOCUMENT DISPLAYED)

03:53:23 20 Q OKAY. DO YOU RECOGNIZE THAT AS THE SCREENSHOT RELATED TO
21 SOME OF THE SURGE TESTING?

22 A I DO.

23 Q DO YOU KNOW WHICH PART THIS IS FOR?

24 A THIS ONE IS A BIT MORE TRICKY. IT'S DEFINITELY NOT THE
03:53:36 25 FAN103. I KNOW THAT.

03:53:39 1 (WITNESS EXAMINES DOCUMENT)

2 **A** AND WHETHER IT'S THE 6841 OR THE 5841, I'M NOT 100 PERCENT

3 SURE.

4 **Q** OKAY. AGAIN, THE TEST RESULTS, NO OSCILLATOR TRACES

03:53:55 5 (INDICATING), RIGHT?

6 **A** THAT'S CORRECT.

7 **Q** AND WE HAVE TALKED ABOUT THE ORIGINAL IDEA. NOW, YOU

8 AGREE THAT THIS SURGE TEST IS A SIMULATION, RIGHT, THAT WAS

9 PERFORMED FOR THE PURPOSES OF THIS LITIGATION. RIGHT?

03:54:09 10 **A** IT'S A SIMULATION TEST, YEAH.

11 **Q** RIGHT. AND YOU UNDERSTAND THAT IT'S SIMULATING A LARGE

12 SURGE LIKE A LIGHTNING STRIKE AT A PARTICULAR POINT IN THE

13 CIRCUIT. RIGHT?

14 **A** WELL, I THINK IT WASN'T SIMULATING LIGHTNING STRIKING THE

03:54:25 15 PIN, BUT IT'S -- ONE OF THE EXAMPLES OF THE SURGE/ESD TEST IS

16 IF YOU HAD A LIGHTNING STRIKE AND THEN IT CAUSES A SURGE, A

17 CHARGE, AND IT'S ENTERING INTO THAT PIN.

18 **Q** SO, FAIR ENOUGH. IT WAS TRYING TO SIMULATE THE NOTION OF

19 A SURGE LIKE IT MIGHT BE CAUSED BY A STRIKE OF LIGHTNING.

03:54:43 20 RIGHT?

21 **A** CORRECT.

22 **Q** OKAY. AND I BELIEVE THAT THAT WOULD HAVE BEEN TRUE FOR

23 ALL THE DIFFERENT SURGE TESTS THAT YOU RELIED ON. RIGHT?

24 THEY WERE ALL DONE THE SAME WAY?

03:54:57 25 **A** THEY WERE ALL DONE THE SAME WAY.

03:55:01 1 Q SO, DR. WEI, LET'S TALK ABOUT THE FIXED FREQUENCY ISSUE ON
2 THE '079.

3 A OKAY.

4 Q SIMILAR TO THE DISCUSSION WE JUST HAD ABOUT CYCLE
03:55:11 5 SKIPPING, YOU DIDN'T PROVIDE, DURING YOUR DIRECT TESTIMONY,
6 ANY ANALYSIS OF THE SCHEMATICS OF THE INTERNAL CIRCUITS THAT
7 ARE RESPONSIBLE FOR CONTROLLING THE SWITCHING FREQUENCY IN ANY
8 OF THE REPRESENTATIVE PARTS. RIGHT?

9 A IN MY DIRECT TESTIMONY TODAY, THAT'S CORRECT.

03:55:31 10 MR. POLLACK: IF I CAN HAVE THE DDX 429, PLEASE.

11 (DOCUMENT DISPLAYED)

12 BY MR. POLLACK:

13 Q DR. WEI, THIS IS ANOTHER SLIDE THAT YOU PUT UP DURING YOUR
14 DIRECT. YOU RECOGNIZE THIS AS THE COURT'S CONSTRUCTION OF
03:55:40 15 "FREQUENCY" -- I'M SORRY, "SWITCHING FREQUENCY" AND "FIXED
16 SWITCHING FREQUENCY," RIGHT?

17 A THAT IS CORRECT.

18 Q AND THE DEFINITION OF "FIXED SWITCHING FREQUENCY" IS "A
19 NONVARYING NUMBER OF SWITCHING CYCLES PER SECOND." RIGHT?

03:55:55 20 A YES.

21 Q NOW, NONE OF THE FAIRCHILD TESTING THAT YOU RELIED ON TO
22 SUPPORT YOUR OPINIONS PROVIDE ANY MEASUREMENT OF THE TOTAL
23 NUMBER OF SWITCHING CYCLES IN A SECOND. FAIR?

24 A YEAH. I BELIEVE -- I'VE TALKED ABOUT IT PLENTY, NOW.

03:56:10 25 Q OKAY. BUT WHEN I ASKED YOU IN YOUR DEPOSITION, HOW DO YOU

03:56:14 1 KNOW FOR ANY OF THE ACCUSED PRODUCTS THAT THE NUMBER OF
2 SWITCHING CYCLES PER SECOND WOULD VARY FROM SECOND TO SECOND,
3 YOU TOLD ME YOU DIDN'T SEE WHY THAT'S IMPORTANT. RIGHT?

4 **A** CORRECT.

03:56:28 5 **Q** NOW, ON THIS NOTION OF FIXED SWITCHING FREQUENCY, AS
6 YOU'VE APPLIED IT IN THIS CASE, IS IT CORRECT -- WELL, I'LL
7 ASK YOU THIS: HAVE YOU EVER SEEN IN A REAL-WORLD COMMERCIAL
8 POWER SUPPLY CONTROLLER OPERATION WITH A PERFECTLY NONVARYING
9 FREQUENCY, AS YOU'VE APPLIED THAT REQUIREMENT IN THIS CASE?

03:56:47 10 **A** SO, I THINK WE'VE DISCUSSED THIS BEFORE AS WELL. AND, I
11 THINK MY ANSWER TODAY IS THE SAME AS BEFORE. THE -- THE CLAIM
12 CONSTRUCTION PROVIDED BY THE COURT IS A NON-VARYING NUMBER OF
13 SWITCHING CYCLES PER SECOND. AND, I DON'T KNOW OF ANY POWER
14 SUPPLY CIRCUITS THAT DON'T HAVE AT LEAST A LITTLE BIT OF
03:57:15 15 VARIATION.

16 **Q** OKAY. SO AS YOU'VE APPLIED IT, YOU WOULD AGREE THAT YOU
17 -- YOU DON'T KNOW OF ANY REAL-WORLD COMMERCIAL POWER SUPPLY
18 THAT WOULD MEET THAT CONSTRUCTION?

19 **A** WELL, IT IS MANDATED BY THE COURT, I BELIEVE, THAT IT'S
03:57:28 20 THE LAW THAT I APPLY LITERALLY THE COURT'S CLAIM CONSTRUCTION.

21 **Q** SO AS YOU HAVE APPLIED IT, THOUGH, THE CIRCUIT OF THE
22 PREFERRED EMBODIMENT OF THE '079 PATENT, IF BUILT IN THE REAL
23 WORLD, IT WOULD ALSO NOT SATISFY "FIXED SWITCHING FREQUENCY"
24 AS YOU HAVE APPLIED IT IN THIS CASE. RIGHT?

03:57:49 25 **A** THAT'S WHAT THE CLAIM CONSTRUCTION TELLS US, YEAH.

03:57:52 1 **Q** THAT'S A YES? FAIR?

2 **A** I THINK SO, YES.

3 **MR. POLLACK:** YOUR HONOR, I'M GOING TO GO ON TO
4 ANOTHER TOPIC. I CAN JUST KEEP GOING. I DON'T WANT TO GO TOO
03:58:01 5 LATE, SO I JUST WANT TO BE RESPECTFUL.

6 **THE COURT:** LET ME ASK A COUPLE OF QUESTIONS ABOUT
7 HOW LONG DR. WEI IS GOING TO BE ON THE STAND. HE WAS ON THE
8 STAND FOR THE BETTER PART OF THE DAY TODAY, ON DIRECT.

9 IF YOUR CROSS-EXAMINATION IS GOING TO BE OF ANY
03:58:21 10 CONSIDERABLE LENGTH IN LIGHT OF THAT, THERE IS NO WAY THAT WE
11 WOULD BE ABLE TO FINISH THE TESTIMONY TODAY.

12 AND, I UNDERSTAND DR. WEI HAS SOME APPEARANCES OR AN
13 APPEARANCE THAT HE NEEDS TO MAKE AT SOME POINT. I'M NOT SURE
14 WHEN HE IS ABLE TO COME BACK, IF IT'S IN ANOTHER COURT, AND
03:58:45 15 HE'S BEEN REQUIRED TO BE THERE FOR THAT PROCEEDING.

16 WE CAN EITHER SEND THE JURY OUT BRIEFLY OR HE CAN STAND BY
17 AND WE CAN DECIDE AFTER THE JURY GOES. WE HAVE TO DO
18 SOMETHING WITH DR. WEI. HE'S ONLY PARTIALLY THROUGH HIS
19 TESTIMONY.

03:59:05 20 **MR. POLLACK:** THAT'S RIGHT, YOUR HONOR. I STILL HAVE
21 A CONSIDERABLE AMOUNT OF TOPICS TO COVER.

22 **THE COURT:** SO THERE'S NO EQUIPMENT THAT THERE WILL
23 BE AN BE A JENSEN COMMITMENT THAT THERE WILL BE AN ABSENCE OF
24 REDIRECT SO THERE'S NOT JUST YOU, THERE'S WHATEVER WE CAN
03:59:19 25 EXPECT OR AT LEAST THINK MIGHT HAPPEN.

03:59:26 1 OKAY. SHOULD WE DISCUSS THIS WITHOUT THE JURY HERE? DO
2 YOU WISH TO CONFER WITH OPPOSING COUNSEL? WE CAN'T HAVE THE
3 JURY HERE TOMORROW, BECAUSE WE HAVEN'T ASKED THEM DO THAT. I
4 BELIEVE HIS COMMITMENT IS SOMEWHERE NEXT WEEK.

03:59:44 5 **MR. POLLACK:** I -- I BELIEVE WE CAN EXCUSE THE JURY
6 AND HAVE THIS CONVERSATION, YOUR HONOR. I DON'T THINK THEY
7 NEED TO BE HERE FOR IT.

8 **THE COURT:** ALL RIGHT, IS WHATEVER ACCOMMODATIONS
9 MADE FOR DR. WEI GOING TO IN ANY WAY CHANGE THE ULTIMATE
04:00:01 10 ANTICIPATED END DATE FOR THE TRIAL? BECAUSE, WE -- WE REALLY
11 CAN'T PUT THE TRIAL OVER TO SOME OTHER TIME PERIOD IN ORDER TO
12 ACCOMMODATE WHATEVER OTHER APPEARANCE HE MIGHT HAVE.

13 **MR. JACOBS:** YOUR HONOR, I THINK THAT WE NEED TO
14 SPEAK WITH DR. WEI ABOUT THAT, OUTSIDE OF THE PRESENCE OF THE
04:00:18 15 JURY. I HOPE NOT, AND I HOPE AND I EXPECT NOT.

16 **THE COURT:** WELL, IT'S NOT GOING TO BE. ALL RIGHT?
17 IT ISN'T A QUESTION OF HOPE NOT.

18 **MR. JACOBS:** I DON'T KNOW HIS SCHEDULE, YOUR HONOR.

19 **THE COURT:** EITHER HIS TESTIMONY WILL BE IN AS
04:00:31 20 TOTALLY EXPLORED OR HE WOULDN'T HAVE ANY TESTIMONY. ALL
21 RIGHT. SO, WE HAVE TO -- WE HAVE TO DETERMINE THAT. BUT WE
22 CAN'T GO OVER TO SOME OTHER TIME THAT WE WOULDN'T HAVE GOTTEN
23 TO ANYWAY. PUTTING HIM AT THE END OF ORDINARY TIME IS ONE
24 THING, BUT STOPPING AND THEN HAVING A HIATUS AND WAITING FOR
04:00:50 25 DR. WEI, WE CAN'T DO.

04:00:52 1 **MR. JACOBS:** AGREED.

2 **THE COURT:** ALL RIGHT. SO, ARE COUNSEL SATISFIED WE
3 CAN EXCUSE THE JURY UNTIL MONDAY?

4 **MR. JACOBS:** YES, YOUR HONOR.

04:01:00 5 **MR. SCHERKENBACH:** YES.

6 **THE COURT:** OKAY. SO LADIES AND GENTLEMEN, AGAIN,
7 NOW THIS HAS BEEN A LONG WEEK, AND I'M SURE A RATHER FATIGUING
8 ONE FOR YOU, WITH ALL THIS VERY TECHNICAL TESTIMONY. MAYBE
9 I'M EXTRAPOLATING FROM MY OWN EXPERIENCE.

04:01:14 10 BUT, IN ANY EVENT, WHAT I WANT TO DO IS AGAIN THANK YOU ON
11 BEHALF OF THE COURT AND COUNSEL, AND THE PARTIES.

12 MAYBE WAIT UNTIL MS. LUCERO GETS TO WHERE SHE'S GOING.

13 I DO WANT TO REMIND YOU OF THE COURT'S ADMONITION. AGAIN,
14 AT THIS POINT YOU HAVE HEARD TESTIMONY AND DISPUTE FROM EXPERT
04:01:40 15 WITNESSES. YOU HAVEN'T HEARD ALL OF THE CROSS EXAMINATION OF
16 DR. WEI. YOU HAVEN'T HEARD ALL THE REST OF THE CASE.

17 I DO JUST WANT TO REMIND YOU, YOU CAN'T TRY AND FIND OUT
18 MORE ON YOUR OWN IN ANY WAY, SHAPE OR FORM, NOR CAN YOU FORM
19 AN ULTIMATELY OPINION ABOUT THE CASE.

04:01:58 20 SO, I HOPE YOU HAVE A VERY NICE BREAK. AND WE WILL SEE
21 YOU AT 9:00 THIS COMING MONDAY. THANK YOU.

22 (JURY EXCUSED)

23 (THE FOLLOWING PROCEEDINGS WERE HELD OUTSIDE OF THE
24 PRESENCE OF THE JURY)

04:02:23 25 **THE COURT:** OKAY. AND DR. WEI, WHY DON'T YOU JUST

04:02:25 1 HAVE A SEAT FOR A MINUTE WHERE YOU ARE. IN CASE WE HAVE TO
2 ASK YOU ANY QUESTIONS, THE REPORTER WILL BE ABLE TO PICK UP
3 WHATEVER YOU HAVE TO SAY.

4 DO WE NEED TO POSE ANY QUESTIONS TO DR. WEI RIGHT NOW? OR
04:02:35 5 DOES COUNSEL WANT TO SPEAK TO HIM OFF THE RECORD?

6 **MR. JACOBS:** OFF THE RECORD, IF WE COULD, PLEASE,
7 YOUR HONOR.

8 **THE COURT:** ALL RIGHT. DO YOU WANT TO STEP DOWN FOR
9 A MOMENT, DR. WEI, OR MORE THAN A MOMENT, AND SPEAK TO
04:02:45 10 MR. JACOBS AND/OR ANYONE ELSE AT COUNSEL TABLE FOR FAIRCHILD?

11 **THE WITNESS:** THANK YOU, YOUR HONOR.

12 **THE COURT:** THANK YOU. ALL RIGHT. WE WILL JUST BE
13 ESSENTIALLY AT EASE WHILE THEY DO THAT.

14 (OFF-THE-RECORD DISCUSSION)

04:03:01 15 **THE COURT:** YOU KNOW, I SAID EARLIER, "WE'RE NOT
16 GOING TO GET THROUGH HIM TODAY, ARE WE?" AND I WAS ASSURED,
17 "OH, YES, WE WOULD." IT DIDN'T APPEAR AT ALL POSSIBLE THAT
18 THAT WOULD HAPPEN, AND IT DIDN'T.

19 SO, YES. NOW, MISTER -- YOU CAN WAIT WHERE YOU ARE,
04:03:17 20 DR. WEI, FOR A MOMENT. DON'T GO TOO FAR, JUST --

21 **MR. JACOBS:** I WAS GOING TO ASK YOU TO PUT HIM BACK
22 IN THE BOX, YOUR HONOR, BUT IT'S OKAY.

23 **THE COURT:** SORT OF HANG AROUND THE PODIUM HERE.
24 WHAT I'M TRYING TO FIND OUT IS, ARE YOU GOING TO REPORT WHAT
04:03:31 25 HIS SITUATION IS, AND WE DON'T NEED HIM TO TELL US DIRECTLY?

04:03:36 1 **MR. JACOBS:** I CAN REPORT THE SITUATION, YOUR HONOR.
2 HE CAN COME BACK FIRST THING MONDAY MORNING AND WE CAN WRAP UP
3 HIS TESTIMONY MONDAY MORNING.

4 **THE COURT:** THAT WOULD BE VERY GOOD.

04:03:42 5 ALL RIGHT. SO DR. WEI, I RECOGNIZE YOU MAYBE HAVE SOME
6 INCONVENIENCE TO YOURSELF AND YOUR SCHEDULE, BUT IT IS
7 IMPORTANT WE TRY COMPLETE YOUR TESTIMONY WITHIN THE CONFINES
8 OF THE TRIAL. SO, I APPRECIATE THAT. THANK YOU.

9 SO DR. WEI IS EXCUSED UNTIL MONDAY AT 9:00.

04:04:00 10 (WITNESS EXCUSED)

11 WHERE ARE WE IN THE CASE? AND I'LL TELL YOU THAT WE CAN
12 USE AT LEAST SOME OF TOMORROW FOR OUR PURPOSES. BUT, WHERE
13 ARE WE IN ALL THIS?

14 **MR. JACOBS:** YOUR HONOR, I SPOKE A LITTLE BIT WITH
04:04:10 15 COUNSEL. I THINK WE WOULD LIKE TO SPEAK WITH THE COURT
16 TOMORROW AFTERNOON. WE GOING TO TRY TO GET TOGETHER TOMORROW
17 MORNING TO DISCUSS JURY INSTRUCTIONS AMONGST OURSELVES TO
18 STREAMLINE.

19 **THE COURT:** OKAY.

04:04:20 20 **MR. JACOBS:** IF WE CAN COME IN AND HAVE SOME TIME
21 WITH THE COURT TOMORROW AFTERNOON TO GO THROUGH THE DISPUTES,
22 THAT WOULD BE GREAT.

23 WE ARE GETTING READY, AS SOON AS DR. WEI IS DONE, TO MOVE
24 TO OUR CASE IN CHIEF. AND SO WE'LL HAVE THE INVENTOR FOR THE
04:04:37 25 '977, PATENT AND THEN OUR EXPERT WITNESS, DR. WOOD.

04:04:40 1 WE HAVE A FEW DEPOSITION, ABOUT AN HOUR, AN HOUR AND A
2 HALF OF PLAYS. AND THEN MY UNDERSTANDING IS THERE WILL BE A
3 RESPONSIVE CASE FROM POWER INTEGRATIONS. WE STILL HAVE
4 DAMAGES EXPERTS IN BOTH DIRECTION.

04:04:55 5 PROBABLY, IN MY ESTIMATION, LOOKING LIKE TESTIMONY WILL
6 PROBABLY GO UNTIL WEDNESDAY, AS IT'S LOOKING RIGHT NOW.

7 **THE COURT:** AND "UNTIL WEDNESDAY," YOU ARE COUNTING
8 WEDNESDAY.

9 **MR. JACOBS:** I AM, YOUR HONOR.

04:05:05 10 **THE COURT:** IN OTHER WORDS, TESTIMONY WILL BE TAKEN
11 ON WEDNESDAY.

12 **MR. JACOBS:** IT JUST SEEMS THAT WAY, UNLESS WE CAN
13 REALLY STREAMLINE ONE WAY OR THE OTHER.

14 **THE COURT:** OKAY. WELL, THAT'S ALL RIGHT. THEN ARE
04:05:13 15 YOU ANTICIPATING ON THURSDAY -- WELL, YOU SEE, HERE'S OUR BIT
16 OF OUR PROBLEM WITH THAT.

17 YOU'RE NOT GOING TO BE ARGUING ON WEDNESDAY, IF YOU HAVE
18 TESTIMONY ON WEDNESDAY, UNLESS IT'S THE BRIEFEST OF TESTIMONY.
19 SO, THEN, YOU WOULD HAVE ARGUMENT, WHICH HAS GOT TO BE AT SOME
04:05:32 20 LENGTH HERE.

21 **MR. JACOBS:** (NODS HEAD)

22 **THE COURT:** AND THEN THERE'S INSTRUCTIONS. WE'RE NOT
23 GOING TO GET THIS CASE TO THE JURY, I DON'T THINK, IN TIME TO
24 MEET OUR SCHEDULE. I'M TRYING TO REMEMBER WHAT WE HAVE ON FOR
04:05:47 25 THE FOLLOWING FRIDAY.

04:05:49 1 **MR. SCHERKENBACH:** YOUR HONOR, IF I MAY, I THINK IF
2 YOU DO THE MATH, WITH THE PARTIES' TIME ALLOCATIONS, THAT WE
3 WILL GET IT DONE.

4 **THE COURT:** SAYING YOU HAVE TO GET IT DONE.

04:06:00 5 **MR. SCHERKENBACH:** YES. AND I THINK WE SHOULD BE
6 REQUIRED TO, AND I THINK WE WILL. I KNOW WE'RE TRACKING OUR
7 TIME CLOSELY, AND I --

8 **THE COURT:** I'M NOT ADJUSTING THE TIME LIMITS. BUT,
9 I HAVEN'T TRIED TO COUNT IT UP TO SEE. AND ONE OF YOU THINKS
04:06:12 10 THEY WOULD ACCOMMODATE PART OF WEDNESDAY, AND THE OTHER OF YOU
11 THINKS WE SHOULD BE THROUGH BY TUESDAY.

12 **MR. SCHERKENBACH:** I THINK WE WOULD FINISH BY THE END
13 OF THE DAY TUESDAY, AND WE'D BE ABLE TO DO CLOSINGS ON
14 WEDNESDAY. IT MIGHT BE WEDNESDAY AFTERNOON, YOU KNOW, BUT WE
04:06:26 15 CAN'T AFFORD HALF OF A DAY OFF, I GUESS IS WHAT I'M SAYING.
16 IF WE HAVE EVIDENCE FINISHING WEDNESDAY MORNING, WE SHOULD
17 CLOSE WEDNESDAY AFTERNOON.

18 **THE COURT:** ALL RIGHT. WELL -- PARDON ME?

19 **MR. JACOBS:** WEDNESDAY IS THE SHORT DAY. I'M JUST
04:06:37 20 WONDERING, WITH THE JURY MAKING PLANS FOR ACTIVITIES WEDNESDAY
21 AFTERNOON AND SO FORTH, WHETHER THAT WOULD EVEN BE POSSIBLE.

22 **THE COURT:** IT MIGHT NOT BE. WE DO HAVE --
23 MS. LUCERO, COULD I SEE YOU, PLEASE?

24 (OFF-THE-RECORD DISCUSSION BETWEEN THE COURT AND CLERK)

04:07:43 25 **THE COURT:** AGAIN, WITHOUT KNOWING WHAT THE JURORS

04:07:47 1 HAVE COMMITTED TO, I DON'T KNOW IF WE COULD EXPAND WEDNESDAY
2 EVEN IF WE, YOU KNOW --

3 (OFF-THE-RECORD DISCUSSION BETWEEN THE COURT AND CLERK)

4 **THE COURT:** WELL, WHAT I CAN DO THE, I WOULD HAVE
04:08:30 5 ASKED THEM -- PERHAPS WE SHOULD HAVE GOTTEN A LITTLE HEAD
6 START ON THIS CONVERSATION. BUT I MIGHT HAVE ASKED THEM AT
7 THE END OF THE DAY TODAY TO GIVE THEM MORE ADVANCE NOTICE OF
8 PERHAPS BEING ABLE TO ADJUST AS TO WEDNESDAY.

9 THERE'S A POSSIBILITY WE COULD TRY AND REACH THEM
04:08:52 10 TELEPHONICALLY BUT IT BECOMES VERY AWKWARD BECAUSE IT ISN'T
11 THE KIND OF THING WHERE YOU CAN LEAVE THEM A MESSAGE AND SAY
12 WE ARE STARTING A HALF HOUR EARLIER. IT REALLY REQUIRES AN
13 INQUIRY.

14 **MR. JACOBS:** I WANT TO CLARIFY SOMETHING ON THE
04:09:04 15 RECORD. COUNSEL REMINDED ME OF THIS. I WANT TO BE SURE IT'S
16 CLEAR, BECAUSE I DON'T WANT THERE TO BE ANY UNCLARITY HERE.

17 SO THE WAY THIS IS GOING TO FINISH UP IS WE ARE GOING TO
18 PUT ON OUR EXPERT ON THE '977, AND WE HAVE A FEW DEPOSITION
19 PLAYS.

04:09:18 20 AND THEN, YOU RECALL, DR. PUTNAM WAS CUT OFF ALMOST TOWARD
21 THE END OF THE HIS CROSS-EXAMINATION ON THEIR PATENTS. WE'RE
22 GOING TO BRING DR. PUTNAM BACK TO FINISH THAT
23 CROSS-EXAMINATION UP. AND THEN OUR DAMAGES EXPERT,
24 MR. MALACKOWSKI, WILL TESTIFY.

04:09:30 25 AND THEN THEY WILL BE PERMITTED TO PUT ON THEIR TECHNICAL

04:09:33 1 CASE WITH REGARD TO THE '977 AND ANY REBUTTAL THAT THEY HAVE
2 AT THE END. DR. WOOD MAY COME BACK AT THE VERY END.

3 **THE COURT:** OKAY. YEAH, I MEAN, THAT WAS KIND OF THE
4 PREVIEW ANYWAY.

04:09:42 5 **MR. JACOBS:** OKAY.

6 **THE COURT:** THE POINT IS NOT WHO'S GOING TO FILL UP
7 THE GOOD AFTERNOON, YOUR HONOR, IT'S HOW LONG THEY'RE GOING TO
8 GO ON FOR.

9 **MR. JACOBS:** THE GAPS.

04:09:49 10 **THE COURT:** AND WE CAN TRY TO SPEAK TO THE JURY ON
11 MONDAY. I CAN TRY TO MAKE SOME ARRANGEMENTS TO TRY AND FREE
12 UP WEDNESDAY AS A FULLER DAY, THAN NOT. WE DON'T KNOW WHERE
13 WE'LL BE, EXACTLY.

14 YOU MIGHT HAVE TO BE READY TO ARGUE. WHO'S AT THE VERY
04:10:07 15 END, AGAIN?

16 **MR. JACOBS:** IT WILL BE THE END OF THEIR TECHNICAL
17 CASE, AND THEN THEIR DAMAGES EXPERT WILL GET TO COME BACK ON
18 OUR PATENT. AND THEN TO THE EXTENT WE HAVE TIME --

19 **THE COURT:** NO, JUST LIKE THE VERY END.

04:10:18 20 **MR. JACOBS:** THE VERY END WILL BE OUR RESPONSE ON THE
21 '977, DR. WOOD, AND MR. MALACKOWSKI.

22 **THE COURT:** WELL, THOSE ARE EXPERTS. IT MIGHT BE
23 HARD TO PREPARE A CLOSING WITHOUT THEIR TESTIMONY IN THE
24 RECORD. IT ISN'T JUST SOME, YOU KNOW, PASSING COMMENT.

04:10:35 25 **MR. JACOBS:** I WOULD LIKE A NIGHT, JUST ONE EVENING,

04:10:38 1 TO DO THAT, YOUR HONOR.

2 **THE COURT:** WELL, IT PROBABLY WOULD BE APPROPRIATE
3 NOT TO MAKE EVERYONE DEAL WITH IT ON THE FLY. BUT I'M JUST,
4 YOU KNOW, CONCERNED HERE. YOU DO KNOW WHAT THEY'RE GOING TO
04:10:50 5 SAY.

6 **MR. SCHERKENBACH:** WE USED TO DO IT IN THE OLD DAYS,
7 YOU KNOW. STAND UP AND --

8 **MR. JACOBS:** IF IT WORKS, WE DO KNOW WHAT THEY ARE
9 GOING TO SAY, LARGELY.

04:10:58 10 **THE COURT:** YOU DO KNOW WHAT HER GOING TO SAY SO I
11 GUESS YOU WOULD HAVE TO AT LEAST BE SORT OF FLEXIBLE.

12 **MR. JACOBS:** SURE WE ARE FLEXIBLE.

13 **MR. SCHERKENBACH:** WE COULD HAVE OF THE OTHER 85
14 SLIDES READY TO GO.

04:11:08 15 **MR. JACOBS:** I THINK WE CAN DO THAT.

16 **THE COURT:** I MEAN, TODAY WAS REALLY VERY TIRING.
17 JUST FOLLOWING ALL OF THESE THINGS. AND THESE -- THESE GRAPHS
18 AND THE OTHER PATENTS AND WHATEVER. AND, AND I HOPE, ALL OF
19 YOU, I'M SURE YOU UNDERSTAND, AND YOU'VE ALL BEEN DOING THIS
04:11:25 20 FOR A LONG TIME. THESE ARE NOT PHYSICISTS. THESE ARE NOT
21 ELECTRICAL ENGINEERS, LET ALONE ENGINEERS WITH PH.D.S AND
22 WHATEVER ELSE AND PROFESSORSHIPS AND WHAT HAVE YOU. NOR IS
23 THE COURT. AND THEY ARE GOING TO HAVE TO UNDERSTAND ALL OF
24 THIS TECHNICAL TESTIMONY.

04:11:48 25 NOW YOUR PRINCIPALS ARE HERE, AND I UNDERSTAND THEY

04:11:52 1 UNDERSTAND IT. THEY MAY BE LOOKING AT ALL OF THIS AND SAYING,
2 "YES, YES THAT MAKES A LOT OF SENSE TO ME," OKAY, OR "THAT WAS
3 A REALLY GOOD POINT."

4 I DON'T KNOW HOW MUCH THAT'S GOING OVER WITH THE JURY.
04:12:05 5 AND I GATHER WITH THE AMOUNT OF TIME AND EFFORT YOU HAVE PUT
6 IN THIS ALREADY THAT YOU ARE NOT INCLINED TO TRY AND DO
7 ANYTHING BUT TAKE IT TO THE BLOODY END.

8 BUT, IT JUST SEEMS TO ME THAT THIS IS A HERCULEAN TASK FOR
9 LAYPERSONS, NO MATTER HOW SMART THEY ARE AND HOW COMMITTED
04:12:27 10 THEY ARE, TO ABSORB ALL OF THIS. IT'S ONE THING TO ABSORB
11 SOMETHING FROM SOMEONE WHO ISN'T DISPUTED. ALL RIGHT? AND
12 THEY TELL YOU SOMETHING, AND YOU'RE IN THEIR CLASS OR
13 WHATEVER, AND YOU SAY, "YES, THAT'S FINE," AND MAYBE YOU
14 QUESTION A COUPLE OF THINGS, BUT THAT WOULD BE BASED ON ONE'S
04:12:43 15 ALREADY HAVING SOME KNOWLEDGE IN THE AREA.

16 THIS IS LIKE THEY'RE GOING TO HAVE TO DECIDE WHICH OF TWO
17 QUALIFIED PEOPLE IS TELLING THEM THE CORRECT RESULT HERE, IN
18 EFFECT. THIS IS LEAVING OUT DAMAGES THAT BOTH OF YOU ARE
19 CLAIMING. ALL RIGHT? SO, JUST, YOU KNOW, KIND OF PUTTING
04:13:04 20 THIS IN PERSPECTIVE. ALL RIGHT.

21 ANYWAY, TOMORROW. I DO THINK IT WOULD BE HELPFUL IF YOU
22 HAD A CHANCE TO SIT BACK, CATCH YOUR BREATH, LOOK AT WHERE THE
23 EVIDENCE IS THUS FAR, BEFORE PURSUING ANY PARTICULAR DISPUTE
24 FULLY ON THE INSTRUCTIONS.

04:13:26 25 I THREW OUT A COUPLE OF CONCERNS AND IDEAS I HAD. I COULD

04:13:31 1 PROBABLY GIVE YOU MORE, BUT MAYBE WE SHOULDN'T DO THAT AT THIS
2 POINT.

3 **MR. SCHERKENBACH:** OUR SENSE WAS WE COULD GET TO A
4 VERY SMALL SET OF THINGS THAT WE HAVE TO ADDRESS.

04:13:46 5 **THE COURT:** WELL, THAT WOULD BE FINE. MY THOUGHT IS
6 IF YOU HAVE A TRIED AND TRUE PATTERN INSTRUCTION AND ONE OR
7 THE OTHER OF YOU IS TRYING TO CHANGE IT IN SOME SIGNIFICANT,
8 YOU KNOW, SUBSTANTIVE WAY, THAT YOU WOULD HAVE TO POINT
9 CAREFULLY TO WHERE THE JURY MIGHT, GIVEN THE PARTICULAR
04:14:06 10 POSTURE OF OUR CASE, NOT UNDERSTAND IT, TO, TO BE COVERING OR
11 NOT COVERING A PARTICULAR POINT THAT NEEDS CALLING OUT
12 SPECIFICALLY, RATHER THAN HAVING ME CHOOSE A ONE-OFF,
13 ESSENTIALLY. EVEN ONE THAT ONE OF YOU OR THE OTHER OR BOTH OF
14 YOU MIGHT HAVE AGREED TO OR GOT USED IN ANOTHER CASE, IN
04:14:29 15 ANOTHER -- YOU KNOW, DISTRICT. ALTHOUGH, IF IT WENT THE FULL
16 ROUTE IN THE OTHER CIRCUIT, THAT MIGHT BE, AT LEAST, SOMETHING
17 TO SUGGEST THAT IT'S MORE VALID THAN NOT.

18 HOWEVER, EVERY CASE IS DIFFERENT, AND THE PURPOSE OF ANY
19 GIVEN INSTRUCTION IN ANY GIVEN CASE MAY BE MORE APPROPRIATE,
04:14:51 20 YOU KNOW, THE CONSTRUCTION MAY BE MORE APPROPRIATE FOR THAT
21 SET OF FACTS THAN OURS.

22 ANYWAY, OKAY. SO, WHAT TIME ARE YOU THINKING OF? 1:30?

23 **MR. JACOBS:** 1:30 WOULD BE PERFECT, YOUR HONOR.

24 **MR. SCHERKENBACH:** SURE.

04:15:02 25 **THE COURT:** ALL RIGHT. SO WE'LL SHOOT FOR 1:30 HERE.

04:15:05 1 WE WILL NEED, I GUESS, A REPORTER FOR THAT.

2 AND THEN, WHETHER WE ARE GOING TO KEEP THE REPORTER FOR
3 ALL OF THE JUST PLAY-BY-PLAY OF TALKING ABOUT THE MATTERS, I
4 DON'T KNOW WHICH WOULD BE THE FASTEST. WE MIGHT KEEP THE
04:15:21 5 REPORTER, SEE HOW IT'S GOING.

6 **MR. JACOBS:** (NODS HEAD)

7 **THE COURT:** BUT THEN POSSIBLY, IF IT -- IF IT'S TOO
8 MUCH CHATTING ABOUT EACH ONE WITHOUT A RESULT IMMEDIATELY,
9 THEN SENDING THE REPORTER BACK TO BE ON STANDBY, JUST
04:15:39 10 DISCUSSING FULLY, AND THEN YOU'LL PUT YOUR BEST POINTS ON THE
11 RECORD IF YOU DIDN'T GET WHAT YOU WANTED.

12 **MR. JACOBS:** THAT SOUNDS GOOD.

13 **THE COURT:** A WAY TO POSSIBLY DO IT.

14 **MR. SCHERKENBACH:** THAT'S AGREEABLE.

04:15:51 15 **THE COURT:** OKAY. ALL RIGHT. WELL, SEE YOU
16 TOMORROW. 1:30.

17 **MR. JACOBS:** THANK YOU, YOUR HONOR.

18 **MR. SCHERKENBACH:** THANK YOU, YOUR HONOR.

19 (PROCEEDINGS CONCLUDED AT 4:14 P.M.)
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CERTIFICATE OF REPORTER

I, BELLE BALL, OFFICIAL REPORTER FOR THE UNITED STATES COURT, NORTHERN DISTRICT OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING IS A CORRECT TRANSCRIPT FROM THE RECORD OF PROCEEDINGS IN THE ABOVE-ENTITLED MATTER.

/S/ BELLE BALL_____

FRIDAY, FEBRUARY 21, 2014

BELLE BALL, CSR 8785, CRR, RDR